

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	525.00
Days Since RI:	525.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	11/23/2022
Report #:	3
DFS:	2
AFE #:	9019715
Total AFE + Sup:	\$3,328,718.68
Daily Field Est. (Cost):	\$352,448.87

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)							
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00			Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date		
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type			Subtype					Date			Note				
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 1,989.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$352,448.87		Cum Field Est To Date \$805,467.90			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 1,988.0		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$		Cum Mud Field Est \$		Total AFE + Sup \$3,328,718.68	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 0.0				Goal Comments Goal Met			
Backbuild		Lateral Inclination		Last Casing String SURFACE, 1,969.0ftKB					Next Casing String PROPOSED INTERMEDIATE 2, ftKB						
Avg Connection Gas			Avg Trip Gas		Avg Background Gas			Max Connection Gas			Max Trip Gas		Max Drill Gas		
Operations Summary															
Rig down on Driver 36-8 1dd 90% R/D 0% Moved 0% R/U															
Operations Next Report Period															
Finish rigging down, Move rig to the University 7-20 F 6H and rig up.															
Operations At Report Time															
Rig down on Driver 36-8 1DD															
Remarks															
No Accidents, Incidents or Spills Reported															
Surface: 100% Complete															
Intermediate1: 0% Complete															
Intermediate2: 0% Complete															
Production Vert: 0% Complete															
Savor Sub 0'.															
Daily NPT:0															
H&P: 0															
3rd Party: 0															
Pioneer: 0															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #	
22:30	7.5	06:00	MOB, MOVE	RD RDMO	NORMAL	Rig Released 11/22/22 @ 2230 Hrs. F/Driver 36-8 1dd.R/D transfer pumps, hoses and PVC. Stage out same. R/D bulk tanks and premix pit, Gens and mud pumps. R/D mud lines.Rig down back yard Remove BOP from subs and stage out. Remove stairs,Lay down derrick, squat ready to start move to the University 7-20 F 6H . RDL: 2 cranes, 1 forklift,1 tandems, 1 Catch truck. 90% R/D 0% Moved 0% R/U 1 Full Crew, 4 Rousabouts			1,989.0		1,989.0				
Hydraulic Calculations															
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)		Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)
Casing Pressure Test															
Test Type		Test Subtype		Date			Item Tested			Failed?		Time (min)		P (psi)	
CASING		STANDARD		11/8/2022 11:00			SURFACE, 1,969.0ftKB			No		30.00		1,000.0	
Kick Offs & Key Depths															
Date			Type		Top Depth (ftKB)				Depth Top (TVD) (ftKB)						
No Data															
Casing Strings															
Description		Set Depth (ftKB)			Set Depth (TVD) (ftKB)			OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)	
CONDUCTOR		106.0			106.0			20	H40	78.67					
SURFACE		1,969.0			1,968.0			13 3/8	J55	54.50		BTC			

Gas Emissions - Flare										
Type		Method		Dur (Min)		Amount		Units	Com	
No Data										
Job Supply Amounts										
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc	Cum Consumed
WATER		FRESH	BBL	0			Transferred from' DRIVER 36-8 1DD'		0	6012.16
DIESEL		FUEL	GAL	5575	0	0	Transferred from' DRIVER 36-8 1DD'		5,575	1610
Mud Additive Amounts										
Des	Type		Units	Rec	Consumed		On Loc		Cum Cons	
Pump Operations										
Pump #	Make			Model		Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0
2	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0
3	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0
Pump Checks										
Pump #		Depth (ftKB)		Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data										
Deviation Surveys										
Date				Description			Job			
11/5/2022 22:00				AS DRILL SURVEY			ODR, 11/5/2022 19:00			
Formations										
Formation Name				Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
251_0_RSRL				888.0			2,101.0	1,999.0		
251_0_SLDO				840.0			2,149.0	2,032.0		
255_0_TNSL_TOP_DOL				-90.0			3,079.0	3,011.0		
256_0_YATES				-132.0			3,121.0	3,097.0		
257_0_SEVEN RIVERS				-434.0			3,423.0	3,381.0		
258_0_QUEEN				-1,102.0			4,091.0	4,091.0		
259_0_GRAYBURG				-1,611.0			4,600.0	4,580.0		
261_0_SAN ANDRES				-1,802.0			4,791.0	4,757.0		
263_5_Top_Cherry_Canyon				-2,693.0			5,682.0	5,777.0		
265_0_CLEARFORK/POP				-3,811.0			6,800.0	6,932.0		
ICP1				-3,861.0			6,850.0			
267_0_SPBY_U_A1/267_0_SPBY				-5,440.0			8,429.0	8,610.0		
267_5_SPBY_M_A1				-5,753.0			8,742.0	9,002.0		
268_5_SPBY_L_A1				-5,984.0			8,973.0			
ALT_ICP2				-6,134.0			9,123.0			
268_5_SPBY_L_A2				-6,033.0			9,022.0			
268_5_SPBY_L_A3				-6,117.0			9,106.0			
268_6_SPBY_L_B1/JO MILL				-6,272.0			9,261.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE				-6,321.0			9,310.0			
ILP				-6,563.0			9,552.0			
PBHL/TD				-6,563.0			9,552.0			
269_0_DEAN				-6,639.0			9,628.0			
304_0_STRAWN				-8,065.0			11,054.0			
Daily Contacts										
Job Contact				Title		Office	Mobile	Email		
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT				AREA DRILLING SUPERINTENDENT		432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM		
SPACEK, KYLE, ENGINEER				ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER				ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
JAY, JON, SUPERINTENDENT				SUPERINTENDENT		432-571-2454	432-234-2702	JON.JAY@PXD.COM		
SATTERFIELD, JOHN, WELLSITE SUPERVISOR				WELLSITE SUPERVISOR			337-578-5339	JOHN.SATTERFIELD@PXD.COM		
ASH, WARREN, WELLSITE SUPERVISOR				WELLSITE SUPERVISOR			661-333-4101	WARREN.ASH@PXD.COM		
TRANSIER, KENNETH, SUPERINTENDENT				SUPERINTENDENT			318-481-3868	KENNETH.TRANSIER@PXD.COM		
WIEST, JUSTIN, MUD ENGINEER				MUD ENGINEER			308-249-2818	JUSTIN.WIEST@PXD.COM		
RIG-H&P 417, RIG PHONE				RIG PHONE		361-489-3691		DL-HP417@PXD.COM		
Personnel Log										
Company									Count	
PIONEER NATURAL RESOURCES USA INC									2	
PIONEER NATURAL RESOURCES USA INC									1	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO									14	

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	526.00
Days Since RI:	526.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	11/24/2022
Report #:	4
DFS:	3
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$50,664.34

Daily Drilling Report

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)												
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00			Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date								
Jobs																					
Responsible Grp 2				Responsible Grp 3				Job Type		Start Date		End Date		Job Status							
DRL ENG - JACKIE LUTHER				AREA TEAM 2				ODR		11/5/2022 19:00				IN PROGRESS							
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																					
Type		Subtype						Date		Note											
MILESTONE		ESTIMATED PAD RELEASE						2/9/2023		1st well on 6 well pad											
Daily Operations																					
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 1,989.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$50,664.34		Cum Field Est To Date \$859,975.26									
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 1,988.0		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$1,300.00		Cum Mud Field Est \$1,300.00		Total AFE + Sup \$3,910,360.88							
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 1,000.0				Goal Comments Goal Met									
Backbuild		Lateral Inclination		Last Casing String SURFACE, 1,969.0ftKB						Next Casing String PROPOSED INTERMEDIATE, 7,000.0ftKB											
Avg Connection Gas 0.00		Avg Trip Gas 0.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 0.00		Max Drill Gas 0.00									
Operations Summary MIRU, raise derrick, nipple up BOPE, cont RU, estimated time to pick up BHA 11/24/22 @ 12:00 hrs. 100% R/D 100% Moved 85% R/U																					
Operations Next Report Period Finish RU, install wear bushing, pick up BHA, TIH picking up DCs & HWDP, DO FE,																					
Operations At Report Time Cont Rig Up on the University 7-20F 6H																					
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 0% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 0'. Daily NPT:0 H&P: 0 3rd Party: 0 Pioneer: 0																					
Time Log																					
Start Time		Dur (hr)		End Time		Phase		Operation		Ops Category		Com		Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs		Prob Ref #	
06:00		10		16:00		MOB, MOVE		MOVE		NORMAL		Cont MIRU on the University 7-20 F 6H. R/U gens, mud tanks, flowline manifold, sub, raise sub. RDL: 4 cranes, 2 forklift,2 tandems, 27 trucks, 64 Loads. 100% R/D 100% Moved 85% R/U 1 Full Crew, 4 Rousabouts		1,989.0		1,989.0					
16:00		6		22:00		MOB, MOVE		RU MIRU		NORMAL		Set in bulk tanks. Install kill line valves on BOP. R/U premix pit. Set in subs, doghouses. VFD, generators, MCC, subs, pin derrick (raise derrick on 11/23/22 @ 22:00 hrs). Pin A-legs.		1,989.0		1,989.0					
22:00		5		03:00		MOB, MOVE		RU MIRU		NORMAL		R/U hydraulics to floor, flow line, rig up back yard, rig floor, top drive, mud tanks & pumps, pick up BOP, center over well		1,989.0		1,989.0					
03:00		3		06:00		MOB, MOVE		RU MIRU		NORMAL		Install mud lines, choke line, rig up flowline, back yard, pits, floor.		1,989.0		1,989.0					
Hydraulic Calculations																					
Dens Mud (lb/gal)		ECD End (lb/gal)		Bit Hydraulic Power (hp)		HP/Area (hp/in²)		Jet Vel (ft/s)		Bit dP (psi)		Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)		Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)	
Mud Checks																					
Time 11/23/2022 20:00		Mud Company PIONEER DRILLING FLUIDS				Type WATER BASE		Depth (ftKB) 1,970.0		Density (lb/gal) 9.90		Funnel Viscosity (s/qt) 28		T Flowline (° F) 0.0							

pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
	1.000	1	1	100.0			
Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)		
11.0	1.3	0.1	0.0	0.100	0.1		
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH	
162,000	1,000.000	0	0/100		0.0	8.5	
Gel 10 sec (lb/100ft²)	Gel 10 min (lb/100ft²)	Gel 30 min (lb/100ft²)					
	1.000	1.000					1.000
Comment							
FLOWLINE TEMPERATURE - NO FLOW, CCI - NO PSI							
Casing Pressure Test							
Test Type	Test Subtype	Date	Item Tested		Failed?	Time (min)	P (psi)
CASING	STANDARD	11/8/2022 11:00	SURFACE, 1,969.0ftKB		No	30.00	1,000.0
Kick Offs & Key Depths							
Date	Type	Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
No Data							
Casing Strings							
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	106.0	106.0	20	H40	78.67		
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	
Gas Emissions - Flare							
Type	Method	Dur (Min)	Amount		Units	Com	
No Data							
Job Supply Amounts							
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc
DIESEL	FUEL	GAL	7486	150			12,911
Cum Consumed							
1760							
Mud Additive Amounts							
Des	Type	Units	Rec	Consumed	On Loc	Cum Cons	
DRILLING FLUID TECH	SUPERVISION	EA	1	1	0.0	1	
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	350	
Pump Operations							
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)	
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0	
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0	
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0	
Pump Checks							
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)	
No Data							
Deviation Surveys							
Date	Description	Job					
11/5/2022 22:00	AS DRILL SURVEY	ODR, 11/5/2022 19:00					
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)		
251_0_RSRL	888.0		2,101.0	1,999.0			
251_0_SLDO	840.0		2,149.0	2,032.0			
255_0_TNSL_TOP_DOL	-90.0		3,079.0	3,011.0			
256_0_YATES	-132.0		3,121.0	3,097.0			
257_0_SEVEN RIVERS	-434.0		3,423.0	3,381.0			
258_0_QUEEN	-1,102.0		4,091.0	4,091.0			
259_0_GRAYBURG	-1,611.0		4,600.0	4,580.0			
261_0_SAN ANDRES	-1,802.0		4,791.0	4,757.0			
263_5_Top_Cherry_Canyon	-2,693.0		5,682.0	5,777.0			
265_0_CLEARFORK/POP	-3,811.0		6,800.0	6,932.0			
ICP1	-3,861.0		6,850.0				
267_0_SPBY_U_A1/267_0_SPBY	-5,440.0		8,429.0	8,610.0			
267_5_SPBY_M_A1	-5,753.0		8,742.0	9,002.0			
268_5_SPBY_L_A1	-5,984.0		8,973.0				
ALT_ICP2	-6,134.0		9,123.0				
268_5_SPBY_L_A2	-6,033.0		9,022.0				
268_5_SPBY_L_A3	-6,117.0		9,106.0				
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,261.0				
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,310.0				
ILP	-6,563.0		9,552.0				
PBHL/TD	-6,563.0		9,552.0				
269_0_DEAN	-6,639.0		9,628.0				
304_0_STRAWN	-8,065.0		11,054.0				
Daily Contacts							
Job Contact	Title	Office	Mobile	Email			
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM			
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM			
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM			

JAY, JON, SUPERINTENDENT	SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM
SATTERFIELD, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM
WIEST, JUSTIN, MUD ENGINEER	MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM
Personnel Log				
Company				Count
PIONEER NATURAL RESOURCES USA INC				2
PIONEER NATURAL RESOURCES USA INC				1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO				14
MID CONTINENT WELL LOGGING SERVICE INC				2
STALLION SOLIDS CONTROL INC				1

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:527.00

Days Since RI:527.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:11/25/2022

Report #:5

DFS:4

AFE #:9019715

Total AFE + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$53,612.30

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)									
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Responsible Grp 2				Responsible Grp 3			Job Type		Start Date			End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00					IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																
Type		Subtype					Date			Note						
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023			1st well on 6 well pad						
Daily Operations																
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 1,989.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$53,612.30			Cum Field Est To Date \$913,587.56			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 1,988.0		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$4,700.00			Cum Mud Field Est \$6,000.00		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 1,000.0				Daily Goal - Next 24 3,000.0				Goal Comments Goal not met				
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String SURFACE, 1,969.0ftKB					Next Casing String PROPOSED INTERMEDIATE, 7,000.0ftKB							
Avg Connection Gas 0.00		Avg Trip Gas 0.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 0.00		Max Drill Gas 0.00				
Operations Summary Continue rigging up, NU BOPE & Test, Install WB, change out saver sub, pick up 12.25" Int1 directional BHA.TIH picking up 8" DC & HWDP.																
Operations Next Report Period TIH, drill out ST, perform FIT, Drill 12.25" Int1 w/15° tangent per Baker plan.																
Operations At Report Time TIH picking up 8" DC & HWDP.																
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 0% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 0'. Daily NPT:0 H&P: 0 3rd Party: 0 Pioneer: 0																
Time Log																
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #				
06:00	2	08:00	MOB, RIG UP	RU MIRU	NORMAL	R/U hydraulics to floor, flow line, rig up back yard, rig floor, top drive, mud tanks & pumps, pick up BOP, center over well			1,989.0	1,989.0						
08:00	3	11:00	MOB, RIG UP	RU MIRU	NORMAL	Install mud lines, choke line, rig up flowline, back yard, pits, floor.			1,989.0	1,989.0						
11:00	2	13:00	MOB, RIG UP	NU_BOPE	NORMAL	Nipple up BOPE.			1,989.0	1,989.0						
13:00	7.5	20:30	MOB, RIG UP	TEST_BOPE	NORMAL	Test BOP. Rams, floor valves & mud pumps 250psi Low / 6,200psi High, Annular 250psi Low / 3500psi High. (Change swivel packing)			1,989.0	1,989.0						
20:30	0.5	21:00	MOB, RIG UP	WRBSH	NORMAL	Install wear bushing.			1,989.0	1,989.0						
21:00	0.5	21:30	MOB, RIG UP	RIG_SVC	NORMAL	Rig service & perform drop inspection.			1,989.0	1,989.0						
21:30	1	22:30	MOB, RIG UP	RU MIRU	NORMAL	Finish rig up & PU floor tools.			1,989.0	1,989.0						
22:30	1.5	00:00	MOB, RIG UP	RIG_RPR	NORMAL	Change saver sub.			1,989.0	1,989.0						
00:00	0.25	00:15	MOB, RIG UP	SFTY	NORMAL	PJSM with Phoenix & Rig crew.			1,989.0	1,989.0						
00:15	2	02:15	INT, PRE DRL	PU_DIR	NORMAL	Pick up Int BHA, Baker 1.50° assembly, with 12.25" Smith XS716. (Extra time due to tongs)			1,989.0	1,989.0						
02:15	3.75	06:00	INT, PRE DRL	PU_BHA	NORMAL	P/U DC & HW. TIH F/134' T/ 486' W/ proper displacemet. (Trouble shoot catwalk)			1,989.0	1,989.0						
Interval Problems																

RIG, 1,989.0ftKB, 11/24/2022 22:30											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party			Comment		
1	1.50	Yes	ROTARY SYSTEM	SAVER SUB		HELMERICH & PAYNE INTERNATIONAL DRILLING CO			Change saver sub on 11/25/22 Depth 1,989' per PNR.		
Drill Strings											
BHA #2 , INTERMEDIATE											
Bit Run			Drill Bit			Bit Type			Make		
2			12 1/4, XS716, 3065			PDC			SMITH		
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)		
13/13/13/13/13/13/13/13/13			1.30		-----						
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)		
Drill String Components											
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make		
24	DRILL PIPE		5	4.28	779.84	1,989.00	15,206.9	50	RIG		
3	HWDP - SPIRALED		5	3.00	89.77	1,209.16	4,488.5	34	RIG		
1	DRILLING JARS - HYDRAULIC		6 1/2	2.63	29.17	1,119.39		30	KNIGHT OIL TOOLS LLC		
20	HWDP		5	3.00	598.74	1,090.22	29,937.0	30	RIG		
1	SUB - XO		8	2.88	3.58	491.48		0	DRILLING TOOLS INTERNATIONAL		
12	DRILL COLLAR		8	2.81	349.96	487.90		0	RIG		
1	SUB - XO		8	2.88	3.76	137.94		0	DRILLING TOOLS INTERNATIONAL		
1	SUB - FILTER		8	3.56	4.99	134.18		0	GE/BAKER HUGHES		
1	SUB - SHOCK		8	3.25	19.68	129.19		0	KNIGHT OIL TOOLS LLC		
1	DRILL COLLAR - NON MAG		8	3.25	29.01	109.51		0	DRILLING TOOLS INTERNATIONAL		
1	MWD TOOL - NON-RETRIEVABLE		8	3.25	35.92	80.50		0	GE/BAKER HUGHES		
1	STABILIZER		8	2.81	7.71	44.58		0	DRILLING TOOLS INTERNATIONAL		
1	MOTOR - STABILIZER SLEEVE		9	3.00	35.55	36.87		0	PHOENIX		
Mud Motors											
SN		Bend Angle		Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend
PHX900079		1.5		SEALED		7:8		8.4			6.74
Sensors											
Sensor Type			Sensor-Bit (ft)			Note					
GAMMA			56.46								
DIRECTIONAL			59.86								
Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
11/24/2022 20:00		PIONEER DRILLING FLUIDS			WATER BASE	1,989.0	9.90	28		0.0	
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	1.000	1	1	100.0							
Solids (%)		Low Gravity Solids (%)			Sand (%)	MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
11.0		1.3			0.0	0.0		0.100		0.1	
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)	Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
162,000		1,000.000			0	0/100				0.0	8.5
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
1.000				1.000				1.000			
Comment											
FLOWLINE TEMPERATURE - NO FLOW, CCI - NO PSI											
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
11/24/2022 09:00		PIONEER DRILLING FLUIDS			WATER BASE	1,989.0	9.90	28		0.0	
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	1.000	1	1	100.0							
Solids (%)		Low Gravity Solids (%)			Sand (%)	MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
11.0		1.3			0.0	0.0		0.100		0.1	
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)	Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
162,000		1,000.000			0	0/100				0.0	8.5
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
1.000				1.000				1.000			
Comment											
FLOWLINE TEMPERATURE - NO FLOW, CCI - NO PSI											
Last BOP Test											
Date		Test Type	Item Tested			Next Test Date		Com			
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW			
Casing Pressure Test											
Test Type	Test Subtype		Date		Item Tested			Failed?	Time (min)		P (psi)
CASING	STANDARD		11/8/2022 11:00		SURFACE, 1,969.0ftKB			No	30.00		1,000.0
Kick Offs & Key Depths											
Date		Type	Top Depth (ftKB)				Depth Top (TVD) (ftKB)				
No Data											

Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0	106.0	20	H40	78.67			
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC		
Gas Emissions - Flare								
Type	Method	Dur (Min)	Amount		Units	Com		
No Data								
Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL	0	1030			11,881	2790
Mud Additive Amounts								
Des		Type	Units	Rec	Consumed	On Loc	Cum Cons	
DRILLING FLUID TECH		SUPERVISION	EA	1	1	0.0	2	
TRUCKING		MISCELLANEOUS	EA	4	4	0.0	4	
TECH SERVICE SUPPORT		SUPERVISION	EA	350	350	0.0	700	
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)		
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)		
No Data								
Deviation Surveys								
Date		Description		Job				
11/5/2022 22:00		AS DRILL SURVEY		ODR, 11/5/2022 19:00				
Formations								
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)			
251_0_RSRL	888.0		2,101.0	1,999.0				
251_0_SLDO	840.0		2,149.0	2,032.0				
255_0_TNSL_TOP_DOL	-90.0		3,079.0	3,011.0				
256_0_YATES	-132.0		3,121.0	3,097.0				
257_0_SEVEN RIVERS	-434.0		3,423.0	3,381.0				
258_0_QUEEN	-1,102.0		4,091.0	4,091.0				
259_0_GRAYBURG	-1,611.0		4,600.0	4,580.0				
261_0_SAN ANDRES	-1,802.0		4,791.0	4,757.0				
263_5_Top_Cherry_Canyon	-2,693.0		5,682.0	5,777.0				
265_0_CLEARFORK/POP	-3,811.0		6,800.0	6,932.0				
ICP1	-3,861.0		6,850.0					
267_0_SPBY_U_A1/267_0_SPBY	-5,440.0		8,429.0	8,610.0				
267_5_SPBY_M_A1	-5,753.0		8,742.0	9,002.0				
268_5_SPBY_L_A1	-5,984.0		8,973.0					
ALT_ICP2	-6,134.0		9,123.0					
268_5_SPBY_L_A2	-6,033.0		9,022.0					
268_5_SPBY_L_A3	-6,117.0		9,106.0					
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,261.0					
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,310.0					
ILP	-6,563.0		9,552.0					
PBHL/TD	-6,563.0		9,552.0					
269_0_DEAN	-6,639.0		9,628.0					
304_0_STRAWN	-8,065.0		11,054.0					
Daily Contacts								
Job Contact	Title	Office	Mobile	Email				
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM				
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM				
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM				
JAY, JON, SUPERINTENDENT	SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM				
SATTERFIELD, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM				
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM				
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM				
WIEST, JUSTIN, MUD ENGINEER	MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM				
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM				
Personnel Log								
Company					Count			
PIONEER NATURAL RESOURCES USA INC					2			
PIONEER NATURAL RESOURCES USA INC					1			
HELMERICH & PAYNE INTERNATIONAL DRILLING CO					14			
MID CONTINENT WELL LOGGING SERVICE INC					2			
STALLION SOLIDS CONTROL INC								

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:528.00

Days Since RI:528.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:11/26/2022

Report #:6

Dfs:5

Afe #:9019715

Total Afe + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$105,575.95

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262	Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date	
Jobs										
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype			Date		Note			
MILESTONE		ESTIMATED PAD RELEASE			2/9/2023		1st well on 6 well pad			
Daily Operations										
Footage/Meterage (ft) 473.00		Drilling Hours 8.00	% Rotating Time 59.38	End Depth (ftKB) 2,462.0	Target Depth (ftKB) 25,106.0	Daily Field Est Total \$105,575.95		Cum Field Est To Date \$1,045,754.11		
24 HR ROP (ft/hr) 59.1	Circulating Hours 6.75	% Sliding Time 40.63	End Depth (TVD) (ftKB) 2,459.1	Target Depth Depth (TVD) (ftKB) 9,552.0	Daily Mud Field Est Total \$17,337.00		Cum Mud Field Est \$23,337.00	Total AFE + Sup \$3,910,360.88		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0		Daily Goal - Next 24 3,000.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String SURFACE, 1,969.0ftKB				Next Casing String PROPOSED INTERMEDIATE, 7,000.0ftKB				
Avg Connection Gas 0.00		Avg Trip Gas 0.00	Avg Background Gas 21.00		Max Connection Gas 0.00		Max Trip Gas 0.00	Max Drill Gas 29.00		
Operations Summary TIH, drill out ST, perform FIT, Drill 12.25" Int1 w/15° tangent per Baker plan F/1,989' T/2,462' SD: 2,372', Inc: 7.33°, Amz: 77.06°, Avg DLS:.0.67°, Above:2', Right:2'.										
Operations Next Report Period Drill 12.25" Int1 w/15° tangent per Baker plan.										
Operations At Report Time Drilling 12.25" Int1 @ 2,462'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 10% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 473'. Daily NPT:0 H&P: 0 3rd Party: 0 Pioneer: 0										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	7.5	13:30	INT, PRE DRL	PU_BHA	NORMAL	P/U DC & HW.5" DP F/304' T/ 1,984,. W/ proper displacemet	1,989.0	1,989.0		
13:30	2	15:30	INT, PRE DRL	HDL_ROTHD	NORMAL	Install rotating head. Troubleshoot clamp Break Circ Thru Gas Buster Test Rot Head	1,989.0	1,989.0		
15:30	2.25	17:45	INT, PRE DRL	RIG_RPR	NORMAL	Troubleshoot Drawworks	1,989.0	1,989.0	2.25	2
17:45	2.75	20:30	INT, PRE DRL	DRL_OUT	NORMAL	Drill out cement & float equipment. (Float collar @ 1,926 / Shoe @ 1,969') (Displace hole & get mud propertys correct)	1,989.0	1,989.0		
20:30	0.25	20:45	INT, PRE DRL	DRL	NORMAL	Drill 10' new formation F/1,989' T/1,999'	1,989.0	1,999.0		
20:45	0.5	21:15	INT, PRE DRL	CIRC	NORMAL	Circ Btms up & MW in/out prior to FIT.	1,999.0	1,999.0		
21:15	0.5	21:45	INT, PRE DRL	FIT	NORMAL	Perform FIT to EMW:13.0 w/ AMW:10.7 @ 235 psi.	1,999.0	1,999.0		
21:45	4.5	02:15	INT, DRL	DRL	NORMAL	Drill 12.25" Int1 F/1,999' T/2,341', (342' @ 76fph), WOB:50, GPM:670, SPP:1,800, Diff:600, RPM:50, TQ:14K, with full returns. MW 10.8 vis 48	1,999.0	2,341.0		
02:15	0.5	02:45	INT, DRL	RIG_SVC	NORMAL	Rig service & change in-line screen.	2,341.0	2,341.0		
02:45	1.75	04:30	INT, DRL	RIG_RPR	NORMAL	Change gaskets on in-line screen.	2,341.0	2,341.0		
04:30	1.5	06:00	INT, DRL	DRL	NORMAL	Drill 12.25" Int1 w/15° Tangent F/2,337' T/2,462', (121' @ 81fph), WOB:40, GPM:800, SPP:2,200, Diff:900, RPM:30, TQ:14K, with full returns. SD:	2,341.0	2,462.0		

						2,372', Inc: 7.33°, Amz: 77.06°, Avg DLS:0.67°, Above:2', Right:2'.															
Interval Problems																					
RIG, 1,989.0ftKB, 11/25/2022 15:30																					
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party				Comment											
2	2.25	No	HOISTING	DRAW WORKS		HELMERICH & PAYNE INTERNATIONAL DRILLING CO				Draw works lost comms.											
Drill Strings																					
BHA #2 , INTERMEDIATE																					
Bit Run			Drill Bit				Bit Type			Make											
2			12 1/4, XS716, 3065				PDC			SMITH											
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)												
13/13/13/13/13/13/13/13/13			1.30		-----		8.00		473.00												
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)												
8.00			473.00		59.1		1,989.0		2,462.0												
Drill String Components																					
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make											
39	DRILL PIPE			5	4.28	1,252.84	2,462.00	24,430.4	59	RIG											
3	HWDP - SPIRALED			5	3.00	89.77	1,209.16	4,488.5	34	RIG											
1	DRILLING JARS - HYDRAULIC			6 1/2	2.63	29.17	1,119.39		30	KNIGHT OIL TOOLS LLC											
20	HWDP			5	3.00	598.74	1,090.22	29,937.0	30	RIG											
1	SUB - XO			8	2.88	3.58	491.48		0	DRILLING TOOLS INTERNATIONAL											
12	DRILL COLLAR			8	2.81	349.96	487.90		0	RIG											
1	SUB - XO			8	2.88	3.76	137.94		0	DRILLING TOOLS INTERNATIONAL											
1	SUB - FILTER			8	3.56	4.99	134.18		0	GE/BAKER HUGHES											
1	SUB - SHOCK			8	3.25	19.68	129.19		0	KNIGHT OIL TOOLS LLC											
1	DRILL COLLAR - NON MAG			8	3.25	29.01	109.51		0	DRILLING TOOLS INTERNATIONAL											
1	MWD TOOL - NON-RETRIEVABLE			8	3.25	35.92	80.50		0	GE/BAKER HUGHES											
1	STABILIZER			8	2.81	7.71	44.58		0	DRILLING TOOLS INTERNATIONAL											
1	MOTOR - STABILIZER SLEEVE			9	3.00	35.55	36.87		0	PHOENIX											
Mud Motors																					
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend									
PHX900079		1.5		SEALED		7:8		8.4				6.74									
Sensors																					
Sensor Type			Sensor-Bit (ft)				Note														
GAMMA			56.46																		
DIRECTIONAL			59.86																		
Drilling Parameters																					
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)				
15:15	17:45	1,989.0	0.00		0	0	0.0	153	159.0	0.0	139	139	139	139	0.0	0.0					
17:45	20:00	1,989.0	0.00		7	0	0.0	564	1,221.0	0.0	140	140	140	140	2.0	2.0					
20:00	20:15	1,989.0	0.00		3	0	0.0	568	1,289.0	0.0	139	139	139	139	2.0	2.0					
20:15	20:30	1,989.0	0.00		3	0	0.0	568	1,305.0	0.0	139	139	139	139	2.0	2.0					
20:30	20:45	1,989.0	10.00	40.0	9	0	0.0	568	1,296.0	0.0	139	139	139	139	3.0	3.0					
20:45	21:00	1,999.0	0.00		2	0	71.3	645	1,554.0	0.0	143	143	143	143	2.0	2.0					
21:00	21:15	1,999.0	0.00		0	0	0.0	645	1,491.0	0.0	147	147	147	147	1.0	1.0					
21:15	22:15	1,999.0	0.00		0	0	0.0	645	1,495.0	0.0	147	147	147	147	1.0	1.0					
22:15	22:45	1,999.0	56.00	112.0	30	30	518.5	671	2,047.0	152.0	112	112	112	112	8.0	8.0					
22:45	23:15	2,055.0	69.00	138.0	30	30	520.0	671	2,131.0	150.0	117	117	117	117	10.0	10.0					
23:15	00:15	2,124.0	25.00	25.0	6	0	177.6	671	1,788.0	32.0	138	138	138	138	2.0	2.0					
00:15	00:30	2,149.0	61.00	244.0	26	45	768.8	671	2,407.0	188.0	123	123	123	123	10.0	10.0					
00:30	01:30	2,210.0	34.00	34.0	5	0	135.7	671	1,980.0	44.0	140	140	140	140	2.0	2.0					
01:30	01:45	2,244.0	66.00	264.0	25	50	493.1	671	2,319.0	205.0	123	123	123	123	10.0	10.0					
01:45	02:45	2,310.0	28.00	28.0	11	0	193.7	896	2,996.0	52.0	133	133	133	133	2.0	2.0					
02:45	04:30	2,338.0	72.00	41.1	34	30	630.3	895	3,458.0	266.0	114	114	114	114	12.0	12.0					
04:30	05:00	2,410.0	22.00	44.0	34	30	143.4	773	2,380.0	45.0	142	142	142	142	2.0	2.0					
05:00	06:00	2,432.0	30.00	30.0	34	30	143.4	773	2,380.0	45.0	142	142	142	142	2.0	2.0					
Hydraulic Calculations																					
Dens Mud (lb/gal)		ECD End (lb/gal)		Bit Hydraulic Power (hp)		HP/Area (hp/in²)		Jet Vel (ft/s)		Bit dP (psi)		Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)		Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)	
10.80		10.86		161.5		1.4		191.3		358.1		21.7		274.3		32.52		43.61		253.48	
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)							
11/25/2022 19:00		PIONEER DRILLING FLUIDS				WATER BASE		1,989.0		10.80		42		50.0							
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)			HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)								
	9.000	2	3	100.0																	
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)									
14.0		3.7				0.1		0.0		0.100		0.1									
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)			pH				

115,000		800.000		0		0/100		0.0		10.0					
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)							
2.000				2.000				2.000							
Comment															
Mud Checks															
Time		Mud Company			Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)		
11/25/2022 09:00		PIONEER DRILLING FLUIDS			WATER BASE		1,989.0		9.90		45		0.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)			
	2.000	1	2	100.0											
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)			Pm (mL/mL)		Pf (mL/mL)		
11.0		2.2				0.1		0.0			0.100		0.1		
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH
148,000		1,000.000			0		0/100						0.0		10.5
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)							
2.000				2.000				2.000							
Comment															
FLOWLINE TEMPERATURE - NO FLOW															
Last BOP Test															
Date		Test Type		Item Tested			Next Test Date			Com					
11/24/2022 13:00		BOP		BOP'S, 11/22/2022 22:30			12/15/2022 13:00			Test BOP 5000 High /250 LOW					
Leak Off and Formation Integrity Tests															
Test Type						Depth (ftKB)			Dens Fluid (lb/gal)						
FORMATION INTEGRITY						1,969.0			13.00						
Casing Pressure Test															
Test Type		Test Subtype		Date		Item Tested			Failed?		Time (min)		P (psi)		
CASING		STANDARD		11/8/2022 11:00		SURFACE, 1,969.0ftKB			No		30.00		1,000.0		
Kick Offs & Key Depths															
Date		Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)								
No Data															
Casing Strings															
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)			
CONDUCTOR		106.0		106.0		20	H40	78.67							
SURFACE		1,969.0		1,968.0		13 3/8	J55	54.50		BTC		1,328.9			
Gas Emissions - Flare															
Type		Method		Dur (Min)			Amount		Units		Com				
No Data															
Job Supply Amounts															
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc		Cum Consumed				
DIESEL		FUEL	GAL	7196	1320		Rig fuel		17,757		4110				
Mud Additive Amounts															
Des				Type			Units	Rec	Consumed		On Loc		Cum Cons		
DRILLING FLUID TECH				SUPERVISION			EA	1	1		0.0		3		
SODA ASH				HARDNESS MODIFIER			LB SACK		20		125.0		20		
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL			TON		24		15.92		24		
BARITE SXS - BARIUM SULFATE				WEIGHTING MATERIAL			LB SACK		80		343.0		80		
LIQUID XAN				VISCOSIFIER			GAL		300		985.0		300		
TECH SERVICE SUPPORT				SUPERVISION			EA	350	350		0.0		1,050		
Pump Operations															
Pump #	Make			Model		Liner Size (in)		Stroke (in)		Vol/Stk (bbl/stk)		P Max (psi)			
1	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0			
2	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0			
3	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0			
Pump Checks															
Pump #	Depth (ftKB)			Time		P (psi)		Strokes (spm)		Q Flow (gpm)		Eff (%)			
1	2,337.0			11/26/2022 02:30		330.0		30		97		95			
1	2,337.0			11/26/2022 02:30		310.0		30		97		95			
1	2,337.0			11/26/2022 02:30		370.0		30		97		95			
2	2,337.0			11/26/2022 02:30		330.0		30		97		95			
2	2,337.0			11/26/2022 02:30		360.0		30		97		95			
2	2,337.0			11/26/2022 02:30		310.0		30		97		95			
Deviation Surveys															
Date				Description				Job							
11/5/2022 22:00				AS DRILL SURVEY				ODR, 11/5/2022 19:00							
Survey Data - All surveys for 24 hr reporting period															
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)	
1,994.00		2.28		74.44		1,992.96		-0.88		11.42		41.82		0.62	
2,089.00		2.22		73.38		2,087.89		-1.01		12.45		45.40		0.08	
2,183.00		3.70		74.04		2,181.76		-1.19		13.81		50.07		1.57	
2,278.00		5.55		75.72		2,276.45		-1.30		15.78		57.46		1.95	
2,372.00		7.33		77.06		2,369.85		-1.19		18.25		67.71		1.90	
Formations															
Formation Name				Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)		Prog Top (TVD) (ftKB)		Final Top MD (ftKB)		Final Top (TVD) (ftKB)			

255_0_TNSL_TOP_DOL	-90.0		3,079.0	3,011.0	
256_0_YATES	-132.0		3,121.0	3,097.0	
257_0_SEVEN RIVERS	-434.0		3,423.0	3,381.0	
258_0_QUEEN	-1,102.0		4,091.0	4,091.0	
259_0_GRAYBURG	-1,611.0		4,600.0	4,580.0	
261_0_SAN ANDRES	-1,802.0		4,791.0	4,757.0	
263_5_Top_Cherry_Canyon	-2,693.0		5,682.0	5,777.0	
265_0_CLEARFORK/POP	-3,811.0		6,800.0	6,932.0	
ICP1	-3,861.0		6,850.0		
267_0_SPBY_U_A1/267_0_SPBY	-5,440.0		8,429.0	8,610.0	
267_5_SPBY_M_A1	-5,753.0		8,742.0	9,002.0	
268_5_SPBY_L_A1	-5,984.0		8,973.0		
ALT_ICP2	-6,134.0		9,123.0		
268_5_SPBY_L_A2	-6,033.0		9,022.0		
268_5_SPBY_L_A3	-6,117.0		9,106.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,261.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,310.0		
ILP	-6,563.0		9,552.0		
PBHL/TD	-6,563.0		9,552.0		
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
JAY, JON, SUPERINTENDENT	SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM
SATTERFIELD, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM
WIEST, JUSTIN, MUD ENGINEER	MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	14
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:529.00

Days Since RI:529.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:11/27/2022

Report #:7

DFS:6

AFE #:9019715

Total AFE + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$132,527.90

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date	
Jobs											
Responsible Grp 2			Responsible Grp 3			Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type		Subtype				Date		Note			
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad			
Daily Operations											
Footage/Meterage (ft) 1,816.00		Drilling Hours 14.75	% Rotating Time 79.66		End Depth (ftKB) 4,278.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$132,527.90		Cum Field Est To Date \$1,015,699.01	
24 HR ROP (ft/hr) 123.1	Circulating Hours 0.50	% Sliding Time 20.34	End Depth (TVD) (ftKB) 4,220.7		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$33,456.89		Cum Mud Field Est \$56,793.89	Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0			Daily Goal - Next 24 2,600.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String SURFACE, 1,969.0ftKB				Next Casing String PROPOSED INTERMEDIATE, 7,000.0ftKB					
Avg Connection Gas 21.00		Avg Trip Gas 21.00		Avg Background Gas 21.00		Max Connection Gas 21.00		Max Trip Gas 23.00		Max Drill Gas 23.00	
Operations Summary TOOH T/1,950', change out in-line screen manifold, TIH T/2,462', Drill 12.25" Int1 w/15° tangent per Baker plan F/2,462' T/4,278'. SD: 4,076', Inc: 15.43°, Amz: 70.53°, Avg DLS:0.79°, Below:0', Left:5'.											
Operations Next Report Period Drill 12.25" Int1 w/15° tangent per Baker plan.											
Operations At Report Time Drilling 12.25" Int1 @ 4,278'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 50% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 2,289'. Daily NPT:8.5 H&P: 2.25 3rd Party: 8.5 Pioneer: 0											
Time Log											
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	0.5	06:30	INT, DRL	TOOH_ELEV	NORMAL	Trip out 5 Stands T/Shoe 1950' Correct fill.		2,462.0	2,462.0	0.50	3
06:30	6.5	13:00	INT, DRL	3RD_PTY	NORMAL	C/O Inline screen manifold		2,462.0	2,462.0	6.50	3
13:00	1	14:00	INT, DRL	RIG_RPR	NORMAL	C/O Encoder on DWorks.		2,462.0	2,462.0	1.00	3
14:00	0.5	14:30	INT, DRL	TIH_ELEV	NORMAL	TIH 5 Stands, Correct disp.		2,462.0	2,462.0	0.50	3
14:30	15.5	06:00	INT, DRL	DRL	NORMAL	Drill 12.25" Int1 w/15° Tangent F/2,462' T/4,278', (1,816' @ 117fph), WOB:40, GPM:850, SPP:3,100, Diff:1,100, RPM:30, TQ:16K, with full returns. SD: 4,076', Inc: 15.43°, Amz: 70.53°, Avg DLS:0.79°, Below:0', Left:5'.		2,462.0	4,278.0		
Interval Problems											
3RD PARTY, 2,462.0ftKB, 11/26/2022 06:00											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment		
3	8.50	No		CIRCULATING SYSTEM	HOSES		WELLBORE INTEGRITY SOLUTIONS LLC		Change out washed 4" valve for in-line screen manifold.		
Drill Strings											
BHA #2 , INTERMEDIATE											
Bit Run			Drill Bit				Bit Type			Make	

2		12 1/4, XS716, 3065					PDC		SMITH								
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull			Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)								
13/13/13/13/13/13/13/13/13/13		1.30		-----			22.75		2,289.00								
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)			Depth In (ftKB)		Depth Out (ftKB)								
22.75		2,289.00		100.6			1,989.0		4,278.0								
Drill String Components																	
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make							
97	DRILL PIPE		5	4.28	3,068.84	4,278.00	59,842.4	94		RIG							
3	HWDP - SPIRALED		5	3.00	89.77	1,209.16	4,488.5	34		RIG							
1	DRILLING JARS - HYDRAULIC		6 1/2	2.63	29.17	1,119.39		30		KNIGHT OIL TOOLS LLC							
20	HWDP		5	3.00	598.74	1,090.22	29,937.0	30		RIG							
1	SUB - XO		8	2.88	3.58	491.48		0		DRILLING TOOLS INTERNATIONAL							
12	DRILL COLLAR		8	2.81	349.96	487.90		0		RIG							
1	SUB - XO		8	2.88	3.76	137.94		0		DRILLING TOOLS INTERNATIONAL							
1	SUB - FILTER		8	3.56	4.99	134.18		0		GE/BAKER HUGHES							
1	SUB - SHOCK		8	3.25	19.68	129.19		0		KNIGHT OIL TOOLS LLC							
1	DRILL COLLAR - NON MAG		8	3.25	29.01	109.51		0		DRILLING TOOLS INTERNATIONAL							
1	MWD TOOL - NON-RETRIEVABLE		8	3.25	35.92	80.50		0		GE/BAKER HUGHES							
1	STABILIZER		8	2.81	7.71	44.58		0		DRILLING TOOLS INTERNATIONAL							
1	MOTOR - STABILIZER SLEEVE		9	3.00	35.55	36.87		0		PHOENIX							
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend					
PHX900079		1.5		SEALED		7:8		8.4				6.74					
Sensors																	
Sensor Type			Sensor-Bit (ft)				Note										
GAMMA			56.46														
DIRECTIONAL			59.86														
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
14:45	15:00	2,462.0	38.00	152.0	28	30	642.1	800	2,920.0	264.0	124	124	124	124	12.0	12.0	
15:00	15:15	2,500.0	26.00	104.0	12	0	297.4	799	2,514.0	123.0	140	140	140	140	4.0	4.0	
15:15	15:45	2,526.0	114.00	228.0	34	30	652.9	848	3,287.0	295.0	121	121	121	121	13.0	13.0	
15:45	16:00	2,640.0	20.00	80.0	15	0	365.3	899	3,213.0	113.0	141	141	141	141	4.0	4.0	
16:00	16:15	2,660.0	58.00	232.0	35	30	547.6	897	3,435.0	317.0	120	120	120	120	13.0	13.0	
16:15	16:30	2,718.0	19.00	76.0	30	30	585.5	946	3,608.0	256.0	132	132	132	132	11.0	11.0	
16:30	16:45	2,737.0	23.00	92.0	18	0	354.3	845	2,995.0	104.0	139	139	139	139	6.0	6.0	
16:45	17:00	2,760.0	53.00	212.0	23	30	562.8	845	3,230.0	254.0	131	131	131	131	12.0	12.0	
17:00	17:15	2,813.0	17.00	68.0	19	30	354.8	845	3,032.0	168.0	141	141	141	141	9.0	9.0	
17:15	17:30	2,830.0	21.00	84.0	22	0	420.1	845	3,046.0	117.0	138	138	138	138	6.0	6.0	
17:30	17:45	2,851.0	56.00	224.0	25	30	560.7	845	3,287.0	247.0	132	132	132	132	12.0	12.0	
17:45	18:00	2,907.0	19.00	76.0	23	30	343.8	845	2,921.0	93.0	139	139	139	139	8.0	8.0	
18:00	18:15	2,926.0	0.00		3	0	0.0	845	2,522.0	1.0	157	157	157	157	0.0	0.0	
18:15	18:30	2,926.0	26.00	104.0	11	0	113.8	845	2,536.0	57.0	148	148	148	148	3.0	3.0	
18:30	19:00	2,952.0	66.00	132.0	25	30	799.2	845	3,193.0	272.0	128	128	128	128	14.0	14.0	
19:00	19:15	3,018.0	10.00	40.0	15	0	113.5	845	2,612.0	35.0	146	146	146	146	3.0	3.0	
19:15	19:45	3,028.0	7.00	14.0	10	0	140.6	845	2,465.0	23.0	151	151	151	151	3.0	3.0	
19:45	20:00	3,035.0	61.00	244.0	24	30	764.5	845	3,057.0	304.0	135	135	135	135	12.0	12.0	
20:00	20:30	3,096.0	93.00	186.0	23	30	805.0	845	3,101.0	154.0	137	137	137	137	11.0	11.0	
20:30	21:00	3,189.0	95.00	190.0	23	30	823.4	845	3,297.0	211.0	137	137	137	137	13.0	13.0	
21:00	21:45	3,284.0	108.00	144.0	25	30	833.8	845	3,307.0	212.0	134	134	134	134	12.0	12.0	
21:45	22:00	3,392.0	0.00		3	0	0.0	845	3,017.0	0.0	160	160	160	160	1.0	1.0	
22:00	22:15	3,392.0	7.00	28.0	14	0	196.4	845	3,133.0	34.0	148	148	148	148	3.0	3.0	
22:15	22:45	3,399.0	20.00	40.0	9	0	87.4	845	3,025.0	46.0	152	152	152	152	3.0	3.0	
22:45	23:00	3,419.0	18.00	72.0	38	0	830.8	826	3,759.0	203.0	123	123	123	123	17.0	17.0	
23:00	23:15	3,437.0	38.00	152.0	42	30	669.4	844	3,610.0	192.0	118	118	118	118	13.0	13.0	
23:15	23:30	3,475.0	33.00	132.0	46	30	758.8	844	3,695.0	179.0	117	117	117	117	13.0	13.0	
23:30	00:30	3,508.0	72.00	72.0	35	37	389.1	673	2,581.0	74.0	133	133	133	133	9.0	9.0	
00:30	00:45	3,580.0	9.00	36.0	32	50	275.4	673	2,405.0	51.0	138	138	138	138	7.0	7.0	
00:45	01:15	3,589.0	17.00	34.0	28	50	425.8	673	2,556.0	53.0	141	141	141	141	9.0	9.0	
01:15	01:45	3,606.0	58.00	116.0	24	60	407.2	673	2,539.0	87.0	143	143	143	143	9.0	9.0	
01:45	02:00	3,664.0	11.00	44.0	21	60	629.4	674	2,760.0	158.0	149	149	149	149	12.0	12.0	
02:00	02:15	3,675.0	36.00	144.0	24	60	581.0	674	2,713.0	141.0	145	145	145	145	11.0	11.0	
02:15	02:30	3,711.0	47.00	188.0	33	30	852.7	843	3,988.0	286.0	134	134	134	134	16.0	16.0	
02:30	03:00	3,758.0	113.00	226.0	34	30	887.4	844	4,026.0	265.0	134	134	134	134	17.0	17.0	
03:00	03:30	3,871.0	75.00	150.0	31	30	788.1	844	3,926.0	256.0	139	139	139	139	15.0	15.0	
03:30	04:00	3,946.0	94.00	188.0	26	30	739.5	844	3,880.0	253.0	146	146	146	146	15.0	15.0	
04:00	04:30	4,040.0	111.00	222.0	36	30	800.9	844	3,934.0	237.0	135	135	135	135	16.0	16.0	
04:30	05:00	4,151.0	77.00	154.0	34	30	981.7	844	3,866.0	190.0	142	142	142	142	16.0	16.0	

05:00	06:00	4,228.0	50.00	50.0	34	30	981.7	844	3,866.0	190.0	142	142	142	142	16.0	16.0
Hydraulic Calculations																
Dens Mud (lb/gal)		ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)		Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)	Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)
10.85		10.93	211.2		1.8		208.9	428.9	23.6		299.5		64.77	263.75		253.97
Mud Checks																
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)		
11/27/2022 05:00		PIONEER DRILLING FLUIDS				WATER BASE		2,462.0		10.85		34		65.0		
pV (cP)	YP (lb/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)			
	4.000		1	2	100.0											
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)				
15.0		3.1				0.1		0.0		2.200		0.1				
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH			
157,000		1,040.000			0		0/100				0.6		10.0			
Gel 10 sec (lb/100ft²)					Gel 10 min (lb/100ft²)					Gel 30 min (lb/100ft²)						
2.000					2.000					2.000						
Comment																
Mud Checks																
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)		
11/26/2022 19:00		PIONEER DRILLING FLUIDS				WATER BASE		3,010.0		10.80		45		70.0		
pV (cP)	YP (lb/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)			
	12.000		3	4	100.0											
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)				
16.0		5.5				0.1		0.0		0.400		0.2				
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH			
159,000		800.000			0		0/100				0.1		9.5			
Gel 10 sec (lb/100ft²)					Gel 10 min (lb/100ft²)					Gel 30 min (lb/100ft²)						
3.000					4.000					5.000						
Comment																
Last BOP Test																
Date		Test Type		Item Tested				Next Test Date				Com				
11/24/2022 13:00		BOP		BOP'S, 11/22/2022 22:30				12/15/2022 13:00				Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests																
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)				
FORMATION INTEGRITY								1,969.0				13.00				
Casing Pressure Test																
Test Type		Test Subtype		Date				Item Tested				Failed?	Time (min)		P (psi)	
CASING		STANDARD		11/8/2022 11:00				SURFACE, 1,969.0ftKB				No	30.00		1,000.0	
Kick Offs & Key Depths																
Date		Type		Top Depth (ftKB)						Depth Top (TVD) (ftKB)						
No Data																
Casing Strings																
Description		Set Depth (ftKB)			Set Depth (TVD) (ftKB)			OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)		
CONDUCTOR		106.0			106.0			20	H40	78.67						
SURFACE		1,969.0			1,968.0			13 3/8	J55	54.50		BTC		1,328.9		
Gas Emissions - Flare																
Type		Method				Dur (Min)				Amount		Units		Com		
No Data																
Job Supply Amounts																
Supply Item Des		Type	Unit Label		Received		Consumed		Returned		Note	Cum On Loc		Cum Consumed		
DIESEL		FUEL	GAL		7208		2498				Rig fuel	22,467		6608		
Mud Additive Amounts																
Des							Type			Units	Rec	Consumed	On Loc	Cum Cons		
DRILLING FLUID TECH							SUPERVISION			EA	1	1	0.0	4		
PMDHYPDX-A140							SHAKER SCREEN			EA		1	47.0	1		
LIQUID HEC - POLYMER							VISCOSIFIER			GAL BKT		2	38.0	2		
TRUCKING							MISCELLANEOUS			EA	5	5	0.0	9		
LIME							ALKALINITY CONTROL			LB SACK		7	245.0	7		
BULK BENTONITE "GEL" - WYOMING BENTONITE							VISCOSIFIER			TON	20.58	14	27.11	14		
SODA ASH							HARDNESS MODIFIER			LB SACK		33	92.0	53		
BULK BARITE - BARIUM SULFATE							WEIGHTING MATERIAL			TON	78.5	60	34.42	84		
LIQUID XAN							VISCOSIFIER			GAL		325	660.0	625		
TECH SERVICE SUPPORT							SUPERVISION			EA	350	350	0.0	1,400		
Pump Operations																
Pump #	Make				Model		Liner Size (in)		Stroke (in)		Vol/Stk (bbl/stk)			P Max (psi)		
1	GARDNER-DENVER				PZ-11-1600		5 1/2		11.00		0.081			7,500.0		
2	GARDNER-DENVER				PZ-11-1600		5 1/2		11.00		0.081			7,500.0		
3	GARDNER-DENVER				PZ-11-1600		5 1/2		11.00		0.081			7,500.0		
Pump Checks																
Pump #	Depth (ftKB)			Time			P (psi)		Strokes (spm)			Q Flow (gpm)			Eff (%)	
1	3,950.0			11/27/2022 03:30			440.0		30			97			95	
1	3,950.0			11/27/2022 03:30			390.0		30			97			95	

1	3,950.0	11/27/2022 03:30	470.0	30	97	95	
2	3,950.0	11/27/2022 03:30	420.0	30	97	95	
2	3,950.0	11/27/2022 03:30	380.0	30	97	95	
2	3,950.0	11/27/2022 03:30	460.0	30	97	95	
Deviation Surveys							
Date		Description	Job				
11/5/2022 22:00		AS DRILL SURVEY	ODR, 11/5/2022 19:00				
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
2,467.00	8.50	75.59	2,463.95	-1.10	21.35	80.42	1.25
2,562.00	9.68	71.16	2,557.75	-1.80	25.68	94.78	1.44
2,657.00	10.42	70.59	2,651.29	-3.25	31.11	110.44	0.79
2,751.00	11.22	68.26	2,743.62	-5.25	37.33	126.96	0.97
2,846.00	12.16	68.00	2,836.65	-7.85	44.50	144.82	0.99
2,940.00	13.08	72.02	2,928.38	-9.93	51.49	164.12	1.35
3,035.00	14.11	73.07	3,020.72	-11.22	58.18	185.42	1.11
3,130.00	14.28	71.99	3,112.82	-12.59	65.17	207.64	0.33
3,224.00	14.19	71.71	3,203.93	-14.22	72.37	229.60	0.12
3,319.00	14.20	72.22	3,296.03	-15.81	79.59	251.75	0.13
3,413.00	15.08	70.36	3,386.98	-17.73	87.22	274.25	1.06
3,508.00	15.44	70.43	3,478.63	-20.12	95.61	297.81	0.38
3,603.00	15.34	70.04	3,570.22	-22.61	104.13	321.53	0.15
3,698.00	15.57	70.62	3,661.79	-25.06	112.65	345.37	0.29
3,792.00	15.59	70.64	3,752.33	-27.37	121.03	369.19	0.02
3,887.00	15.55	70.29	3,843.85	-29.78	129.55	393.22	0.11
4,076.00	15.43	70.53	4,025.98	-34.60	146.48	440.77	0.07
Formations							
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
259_0_GRAYBURG		-1,611.0			4,600.0	4,580.0	
261_0_SAN ANDRES		-1,802.0			4,791.0	4,757.0	
263_5_Top_Cherry_Canyon		-2,693.0			5,682.0	5,777.0	
265_0_CLEARFORK/POP		-3,811.0			6,800.0	6,932.0	
ICP1		-3,861.0			6,850.0		
267_0_SPBY_U_A1/267_0_SPBY		-5,440.0			8,429.0	8,610.0	
267_5_SPBY_M_A1		-5,753.0			8,742.0	9,002.0	
268_5_SPBY_L_A1		-5,984.0			8,973.0		
ALT_ICP2		-6,134.0			9,123.0		
268_5_SPBY_L_A2		-6,033.0			9,022.0		
268_5_SPBY_L_A3		-6,117.0			9,106.0		
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,261.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,310.0		
ILP		-6,563.0			9,552.0		
PBHL/TD		-6,563.0			9,552.0		
269_0_DEAN		-6,639.0			9,628.0		
304_0_STRAWN		-8,065.0			11,054.0		
Daily Contacts							
Job Contact		Title	Office	Mobile	Email		
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM		
SPACEK, KYLE, ENGINEER		ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER		ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
JAY, JON, SUPERINTENDENT		SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM		
TRANSIER, KENNETH, SUPERINTENDENT		SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM		
SATTERFIELD, JOHN, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM		
HEFNER, KENNETH, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM		
WIEST, JUSTIN, MUD ENGINEER		MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM		
RIG-H&P 417, RIG PHONE		RIG PHONE	361-489-3691		DL-HP417@PXD.COM		
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
PIONEER NATURAL RESOURCES USA INC							1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							14
MID CONTINENT WELL LOGGING SERVICE INC							2
STALLION SOLIDS CONTROL INC							1

H & P 417

Accept: 11/22/2022

Release:

Days Since LTI: 530.00

Days Since RI: 530.00

PERMIAN ASSET TEAM

Job: ODR

Report Date: 11/28/2022

Report #: 8

DFS: 7

AFE #: 9019715

Total AFE + Sup: \$3,910,360.88

Daily Field Est. (Cost): \$93,788.18

Daily Drilling Report

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)						
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00			Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date		
Jobs															
Responsible Grp 2				Responsible Grp 3				Job Type		Start Date		End Date		Job Status	
DRL ENG - JACKIE LUTHER				AREA TEAM 2				ODR		11/5/2022 19:00				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype						Date		Note					
MILESTONE		ESTIMATED PAD RELEASE						2/9/2023		1st well on 6 well pad					
Daily Operations															
Footage/Meterage (ft) 2,736.00		Drilling Hours 23.75		% Rotating Time 80.00		End Depth (ftKB) 7,014.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$93,788.18		Cum Field Est To Date \$1,109,487.19			
24 HR ROP (ft/hr) 115.2		Circulating Hours 0.25		% Sliding Time 20.00		End Depth (TVD) (ftKB) 6,859.6		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$18,515.68		Cum Mud Field Est \$75,309.57		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,600.0				Daily Goal - Next 24 0.0				Goal Comments Goal Met			
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String SURFACE, 1,969.0ftKB						Next Casing String INTERMEDIATE, 7,000.0ftKB					
Avg Connection Gas 27.00		Avg Trip Gas 0.00		Avg Background Gas 23.00			Max Connection Gas 28.00			Max Trip Gas 0.00		Max Drill Gas 28.00			
Operations Summary Drill 12.25" Int1 w/15° tangent per Baker plan F/4,278' to TD @ 7,014', circulate. SD: 6,814', Inc: 14.77°, Amz: 68.32°, Avg DLS:.0.50°, Above:17', Left:10'.															
Operations Next Report Period Circ, TOO H for 9 5/8" Int1 Csg, L/D Dir BHA, pull wear bushing, RURI w/9 5/8" Int1 Csg.															
Operations At Report Time Circulate at TD 12.25" Int1 @ 7,014'.															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 5,025'. Daily NPT:0 H&P: 2.25 3rd Party: 8.5 Pioneer: 0															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #	
06:00	24	06:00	INT, DRL	DRL	NORMAL	Drill 12.25" Int1 w/15° Tangent F/4,278' T/7,014', (2,736' @ 114fph), WOB:40, GPM:900, SPP:3,600, Diff:1,100, RPM:30, TQ:20K, with full returns. SD: 6,814', Inc: 14.77°, Amz: 68.32°, Avg DLS:.0.50°, Above:17', Left:10'.			4,278.0		7,014.0				
Drill Strings															
BHA #2 , INTERMEDIATE															
Bit Run 2				Drill Bit 12 1/4, XS716, 3065						Bit Type PDC		Make SMITH			
Nozzles (1/32") 13/13/13/13/13/13/13/13/13				Bit Total Fluid Area (nozzles) (in²) 1.30			IADC Bit Dull -----			Hours Drilled By Bit (hr) 46.75		Depth Drilled By Bit (ft) 5,025.00			
BHA Drilling Time (hr) 46.75				BHA Depth Drilled (ft) 5,025.00			BHA ROP (ft/hr) 107.5			Depth In (ftKB) 1,989.0		Depth Out (ftKB) 7,014.0			
Drill String Components															
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make			
185	DRILL PIPE				5	4.28	5,804.84	7,014.00	113,194.4	148		RIG			
3	HWDP - SPIRALED				5	3.00	89.77	1,209.16	4,488.5	34		RIG			
1	DRILLING JARS - HYDRAULIC				6 1/2	2.63	29.17	1,119.39		30		KNIGHT OIL TOOLS LLC			
20	HWDP				5	3.00	598.74	1,090.22	29,937.0	30		RIG			

1	SUB - XO	8	2.88	3.58	491.48		0	DRILLING TOOLS INTERNATIONAL																					
12	DRILL COLLAR	8	2.81	349.96	487.90		0	RIG																					
1	SUB - XO	8	2.88	3.76	137.94		0	DRILLING TOOLS INTERNATIONAL																					
1	SUB - FILTER	8	3.56	4.99	134.18		0	GE/BAKER HUGHES																					
1	SUB - SHOCK	8	3.25	19.68	129.19		0	KNIGHT OIL TOOLS LLC																					
1	DRILL COLLAR - NON MAG	8	3.25	29.01	109.51		0	DRILLING TOOLS INTERNATIONAL																					
1	MWD TOOL - NON-RETRIEVABLE	8	3.25	35.92	80.50		0	GE/BAKER HUGHES																					
1	STABILIZER	8	2.81	7.71	44.58		0	DRILLING TOOLS INTERNATIONAL																					
1	MOTOR - STABILIZER SLEEVE	9	3.00	35.55	36.87		0	PHOENIX																					
Mud Motors																													
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defin Type		Bit To Bend																	
PHX900079		1.5		SEALED		7:8		8.4				6.74																	
Sensors																													
Sensor Type				Sensor-Bit (ft)				Note																					
GAMMA				56.46																									
DIRECTIONAL				59.86																									
Drilling Parameters																													
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)												
06:00	06:45	4,278.0	48.00	64.0	29	30	931.4	844	3,853.0	182.0	143	143	143	143	17.0	17.0													
06:45	07:00	4,326.0	16.00	64.0	34	30	768.6	844	3,810.0	185.0	155	155	155	155	16.0	16.0													
07:00	07:15	4,342.0	9.00	36.0	17	0	219.3	845	3,221.0	44.0	152	152	152	152	5.0	5.0													
07:15	07:45	4,351.0	11.00	22.0	13	0	206.0	902	3,531.0	26.0	149	149	149	149	5.0	5.0													
07:45	08:00	4,362.0	58.00	232.0	27	30	899.9	898	4,353.0	291.0	146	146	146	146	19.0	19.0													
08:00	08:15	4,420.0	18.00	72.0	23	30	650.3	901	3,993.0	230.0	164	164	164	164	14.0	14.0													
08:15	08:30	4,438.0	8.00	32.0	17	0	170.8	902	3,550.0	50.0	158	158	158	158	4.0	4.0													
08:30	09:15	4,446.0	25.00	33.3	16	0	190.3	902	3,523.0	33.0	156	156	156	156	4.0	4.0													
09:15	09:30	4,471.0	61.00	244.0	24	30	884.7	899	4,332.0	246.0	149	149	149	149	18.0	18.0													
09:30	09:45	4,532.0	9.00	36.0	21	0	247.6	902	3,671.0	35.0	152	152	152	152	5.0	5.0													
09:45	10:15	4,541.0	68.00	136.0	37	30	752.0	900	4,245.0	180.0	143	143	143	143	17.0	17.0													
10:15	11:00	4,609.0	106.00	141.3	39	30	783.5	900	4,234.0	190.0	146	146	146	146	17.0	17.0													
11:00	11:30	4,715.0	7.00	14.0	24	0	69.7	902	3,525.0	15.0	162	162	162	162	2.0	2.0													
11:30	12:15	4,722.0	76.00	101.3	37	30	763.8	900	4,154.0	141.0	147	147	147	147	15.0	15.0													
12:15	13:00	4,798.0	94.00	125.3	42	30	723.2	901	4,192.0	125.0	152	152	152	152	15.0	15.0													
13:00	13:45	4,892.0	94.00	125.3	44	30	941.2	900	4,502.0	181.0	142	142	142	142	18.0	18.0													
13:45	14:00	4,986.0	14.00	56.0	40	30	539.8	901	4,106.0	121.0	155	155	155	155	14.0	14.0													
14:00	14:30	5,000.0	11.00	22.0	25	0	226.5	629	2,151.0	24.0	158	158	158	158	3.0	3.0													
14:30	15:15	5,011.0	14.00	18.7	30	0	234.5	902	3,695.0	27.0	157	157	157	157	3.0	3.0													
15:15	15:30	5,025.0	55.00	220.0	42	30	875.2	900	4,479.0	177.0	145	145	145	145	19.0	19.0													
15:30	16:15	5,080.0	110.00	146.7	45	30	719.8	900	4,353.0	176.0	150	150	150	150	18.0	18.0													
16:15	16:30	5,190.0	0.00		1	0	0.0	901	3,524.0	0.0	182	182	182	182	0.0	0.0													
16:30	17:00	5,190.0	22.00	44.0	30	0	290.2	901	3,827.0	52.0	152	152	152	152	5.0	5.0													
17:00	17:30	5,212.0	51.00	102.0	31	30	669.4	900	4,273.0	193.0	150	150	150	150	19.0	19.0													
17:30	17:45	5,263.0	9.00	36.0	27	30	691.4	629	2,674.0	78.0	165	165	165	165	16.0	16.0													
17:45	18:45	5,272.0	81.00	81.0	26	30	479.1	648	2,620.0	75.0	170	170	170	170	14.0	14.0													
18:45	19:00	5,353.0	9.00	36.0	25	30	462.9	648	2,605.0	73.0	168	168	168	168	14.0	14.0													
19:00	19:30	5,362.0	97.00	194.0	28	30	880.8	894	4,404.0	199.0	163	163	163	163	18.0	18.0													
19:30	19:45	5,459.0	20.00	80.0	34	30	579.7	898	4,197.0	131.0	169	169	169	169	15.0	15.0													
19:45	20:00	5,479.0	10.00	40.0	35	0	136.5	900	3,625.0	42.0	167	167	167	167	3.0	3.0													
20:00	20:30	5,489.0	64.00	128.0	14	30	768.0	896	4,260.0	223.0	171	171	171	171	19.0	19.0													
20:30	21:00	5,553.0	93.00	186.0	37	30	884.2	898	4,375.0	179.0	166	166	166	166	18.0	18.0													
21:00	21:30	5,646.0	95.00	190.0	37	30	836.6	898	4,328.0	193.0	166	166	166	166	18.0	18.0													
21:30	22:15	5,741.0	93.00	124.0	39	30	826.1	898	4,317.0	161.0	165	165	165	165	17.0	17.0													
22:15	22:45	5,834.0	104.00	208.0	36	30	967.7	898	4,458.0	191.0	168	168	168	168	19.0	19.0													
22:45	23:15	5,938.0	84.00	168.0	36	30	948.0	898	4,533.0	192.0	170	170	170	170	19.0	19.0													
23:15	23:45	6,022.0	95.00	190.0	28	30	1,023.1	898	4,610.0	226.0	178	178	178	178	19.0	19.0													
23:45	00:15	6,117.0	94.00	188.0	33	30	916.4	899	4,576.0	222.0	179	179	179	179	19.0	19.0													
00:15	00:30	6,211.0	21.00	84.0	32	30	701.1	900	4,288.0	193.0	188	188	188	188	16.0	16.0													
00:30	00:45	6,232.0	5.00	20.0	34	0	144.0	901	3,714.0	30.0	185	185	185	185	2.0	2.0													
00:45	01:15	6,237.0	84.00	168.0	37	30	900.9	899	4,470.0	201.0	181	181	181	181	19.0	19.0													
01:15	01:45	6,321.0	82.00	164.0	34	30	859.7	900	4,428.0	194.0	184	184	184	184	19.0	19.0													
01:45	06:00	6,403.0	611.00	143.8	34	30	859.7	900	4,428.0	194.0	184	184	184	184	19.0	19.0													
Hydraulic Calculations																													
Dens Mud (lb/gal)		ECD End (lb/gal)		Bit Hydraulic Power (hp)		HP/Area (hp/in²)		Jet Vel (ft/s)		Bit dP (psi)		Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)													
10.80		10.89		254.9		2.2		222.8		485.5		25.2		319.4		113.37													
Mud Checks																													
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)															
11/28/2022 05:00		PIONEER DRILLING FLUIDS				WATER BASE		4,278.0		10.80		42		80.0															

pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)			
	4.000	1	2	100.0						
Solids (%)	Low Gravity Solids (%)			Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)			
16.0	4.6			0.2	0.0	1.200	0.2			
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)		Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH			
175,000	1,000.000	0		0/100		0.3	10.0			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)		Gel 30 min (lb/100ft²)				
2.000				2.000		3.000				
Comment										
Mud Checks										
Time	Mud Company			Type	Depth (ftKB)	Density (lb/gal)	T Flowline (° F)			
11/27/2022 20:00	PIONEER DRILLING FLUIDS			WATER BASE	5,490.0	10.80	35 80.0			
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)			
	1.000	1	2	100.0						
Solids (%)	Low Gravity Solids (%)			Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)			
15.0	3.2			0.1	0.0	0.500	0.1			
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)		Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH			
161,000	800.000	0		0/100		0.1	10.0			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)		Gel 30 min (lb/100ft²)				
1.000				1.000		1.000				
Comment										
Last BOP Test										
Date		Test Type	Item Tested		Next Test Date	Com				
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30		12/15/2022 13:00	Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests										
Test Type				Depth (ftKB)		Dens Fluid (lb/gal)				
FORMATION INTEGRITY				1,969.0		13.00				
Casing Pressure Test										
Test Type	Test Subtype	Date		Item Tested		Failed?	Time (min)	P (psi)		
CASING	STANDARD	11/8/2022 11:00		SURFACE, 1,969.0ftKB		No	30.00	1,000.0		
Kick Offs & Key Depths										
Date		Type	Top Depth (ftKB)		Depth Top (TVD) (ftKB)					
No Data										
Casing Strings										
Description	Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0		106.0		20	H40	78.67			
SURFACE	1,969.0		1,968.0		13 3/8	J55	54.50	BTC	1,328.9	
Gas Emissions - Flare										
Type		Method		Dur (Min)		Amount	Units	Com		
No Data										
Job Supply Amounts										
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed	
DIESEL		FUEL	GAL	0	3938		Rig fuel	18,529	10546	
Mud Additive Amounts										
Des				Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH				SUPERVISION		EA	1	1	0.0	5
TRUCKING				MISCELLANEOUS		EA	3	3	0.0	12
WO DEFOAMER A				DEFOAMER		GAL CAN		8	66.0	8
LIME				ALKALINITY CONTROL		LB SACK		12	233.0	19
PMDHYPDX-A140				SHAKER SCREEN		EA		13	34.0	14
BULK BENTONITE "GEL" - WYOMING BENTONITE				VISCOSIFIER		TON	17.37	15	20.56	29
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL		TON	19.32	15	38.74	99
SODA ASH				HARDNESS MODIFIER		LB SACK		68	24.0	121
LIQUID XAN				VISCOSIFIER		GAL		230	430.0	855
TECH SERVICE SUPPORT				SUPERVISION		EA	350	350	0.0	1,750
Pump Operations										
Pump #	Make		Model		Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
2	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
3	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
Pump Checks										
Pump #	Depth (ftKB)		Time		P (psi)	Strokes (spm)	Q Flow (gpm)		Eff (%)	
1	6,782.0		11/28/2022 04:00		490.0	30	97		95	
1	6,782.0		11/28/2022 04:00		420.0	30	97		95	
1	6,782.0		11/28/2022 04:00		380.0	30	97		95	
2	6,782.0		11/28/2022 04:00		420.0	30	97		95	
2	6,782.0		11/28/2022 04:00		470.0	30	97		95	
2	6,782.0		11/28/2022 04:00		380.0	30	97		95	
Deviation Surveys										
Date			Description			Job				
11/5/2022 22:00			AS DRILL SURVEY			ODR, 11/5/2022 19:00				
Survey Data - All surveys for 24 hr reporting period										

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
4,358.00	15.38	70.11	4,297.90	-42.17	171.95	511.04	0.13
4,453.00	15.50	71.42	4,389.47	-44.43	180.28	534.92	0.39
4,547.00	15.46	72.36	4,480.06	-46.18	188.07	558.76	0.27
4,641.00	15.35	72.36	4,570.68	-47.72	195.64	582.56	0.12
4,736.00	15.12	72.93	4,662.34	-49.13	203.09	606.38	0.29
4,830.00	14.58	72.62	4,753.20	-50.44	210.22	629.39	0.58
4,924.00	14.02	71.61	4,844.29	-51.97	217.35	651.49	0.65
5,019.00	14.76	73.70	4,936.31	-53.29	224.37	674.03	0.95
5,114.00	15.15	74.91	5,028.09	-53.96	231.00	697.63	0.53
5,208.00	15.62	74.60	5,118.72	-54.46	237.56	721.69	0.51
5,303.00	16.06	74.66	5,210.12	-55.03	244.43	746.69	0.46
5,397.00	16.09	74.72	5,300.44	-55.57	251.31	771.79	0.04
5,492.00	15.72	73.18	5,391.81	-56.45	258.50	796.81	0.59
5,586.00	15.88	72.51	5,482.25	-57.81	266.05	821.27	0.26
5,680.00	15.81	72.26	5,572.68	-59.38	273.82	845.73	0.10
5,775.00	15.73	72.22	5,664.11	-61.02	281.69	870.32	0.08
5,869.00	15.69	72.16	5,754.59	-62.67	289.48	894.55	0.05
5,963.00	15.49	71.84	5,845.14	-64.38	297.28	918.58	0.23
6,058.00	15.11	71.51	5,936.77	-66.22	305.16	942.37	0.41
6,152.00	15.23	71.20	6,027.49	-68.17	313.03	965.68	0.15
6,247.00	15.29	71.33	6,119.14	-70.18	321.06	989.36	0.07
6,341.00	15.50	70.96	6,209.77	-72.25	329.12	1,012.98	0.25
6,436.00	15.24	69.71	6,301.37	-74.68	337.60	1,036.69	0.44
6,531.00	15.25	69.28	6,393.03	-77.46	346.35	1,060.08	0.12
6,625.00	15.33	69.39	6,483.70	-80.29	355.09	1,083.28	0.09
6,719.00	15.02	68.50	6,574.43	-83.27	363.93	1,106.24	0.41
6,814.00	14.77	68.32	6,666.23	-86.45	372.92	1,128.95	0.27

Formations					
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
267_0_SPBY_U_A1/267_0_SPBY	-5,440.0		8,429.0	8,610.0	
267_5_SPBY_M_A1	-5,753.0		8,742.0	9,002.0	
268_5_SPBY_L_A1	-5,984.0		8,973.0		
ALT_ICP2	-6,134.0		9,123.0		
268_5_SPBY_L_A2	-6,033.0		9,022.0		
268_5_SPBY_L_A3	-6,117.0		9,106.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,261.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,310.0		
ILP	-6,563.0		9,552.0		
PBHL/TD	-6,563.0		9,552.0		
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
JAY, JON, SUPERINTENDENT	SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM
SATTERFIELD, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
WIEST, JUSTIN, MUD ENGINEER	MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	14
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	531.00
Days Since RI:	531.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	11/29/2022
Report #:	9
DFS:	8
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$449,391.88

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype					Date			Note					
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023			1st well on 6 well pad					
TXRRC CALL		CEMENT INT					11/28/2022 18:30			Diana Operator #4					
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 7,014.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$449,391.88		Cum Field Est To Date \$1,559,255.82			
24 HR ROP (ft/hr)		Circulating Hours 2.75		% Sliding Time		End Depth (TVD) (ftKB) 6,860.1		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$7,060.32		Cum Mud Field Est \$82,369.89		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 10.0				Goal Comments Goal Met			
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String SURFACE, 1,969.0ftKB					Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB						
Avg Connection Gas 32.00		Avg Trip Gas 23.00		Avg Background Gas 27.00			Max Connection Gas 34.00			Max Trip Gas 26.00		Max Drill Gas 30.00			
Operations Summary Circ, TOO H for 9 5/8" Int1 Csg (wash & ream tight spots), L/D Dir BHA, pull wear bushing, rig up casing crew, make up & test floats, run 9 5/8" Int1 Csg F/128' T/7,000'.															
Operations Next Report Period Circulate Csg, Cmt 9 5/8" Csg, install wear bushing, P/U DO BHA, TIH, drill ST & 10' new formation, circ, FIT, TOO H for Dir. BHA.															
Operations At Report Time Run 9 5/8" Int1 Casing @ 7,000'.															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Intermediate2: 0% Complete Production Vert: 0% Complete Savor Sub 5,025'. Daily NPT:0 H&P: 2.25 3rd Party: 8.5 Pioneer: 0															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #			
06:00	2.5	08:30	INT, POST DRL	CIRC	NORMAL	Circ. 3 bottoms up. 3X 40bbl sweeps.			7,014.0	7,014.0					
08:30	0.5	09:00	INT, POST DRL	CIRC	NORMAL	Spot 240bbbls pad mud.			7,014.0	7,014.0					
09:00	0.25	09:15	INT, POST DRL	FLOW_CHK	NORMAL	Flow check, well static.			7,014.0	7,014.0					
09:15	0.5	09:45	INT, POST DRL	TOOH_ELEV	NORMAL	TOH wet, F/7014 T/6390', hole taking proper fill. Could not pull.			7,014.0	7,014.0					
09:45	1.5	11:15	INT, POST DRL	TOOH_NONELEV	NORMAL	W/R F/6,390' T/6,310', 900:GPM 65:RPM full returns. 10.8 MW			7,014.0	7,014.0					
11:15	1	12:15	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/6310 T/5540', hole taking proper fill. Could not Pull.			7,014.0	7,014.0					
12:15	2	14:15	INT, POST DRL	TOOH_NONELEV	NORMAL	W/R F/5540' T/5310' 900GPM 65RPM full returns. 10.8 MW			7,014.0	7,014.0					
14:15	2.5	16:45	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/5310' T/1,298', hole taking proper fill.			7,014.0	7,014.0					
16:45	0.5	17:15	INT, POST DRL	HDL_ROT HD	NORMAL	Pull rotating head & install trip nipple. Flow check, well static.			7,014.0	7,014.0					
17:15	1.75	19:00	INT, POST DRL	HDL_BHA	NORMAL	Handle HWDP & L/D 8" DC. Hole taking proper fill.			7,014.0	7,014.0					
19:00	0.25	19:15	INT, POST DRL	SFTY	NORMAL	PJSM with rig crews & Baker directional on L/D			7,014.0	7,014.0					

						BHA.				
19:15	1	20:15	INT, POST DRL	LD_DIR	NORMAL	L/D Baker Tools.	7,014.0	7,014.0		
20:15	0.5	20:45	INT, POST DRL	WRBSH	NORMAL	Pull wear bushing, clean & prep rig floor for 9 5/8" casing.	7,014.0	7,014.0		
20:45	0.25	21:00	INT, POST DRL	SFTY	NORMAL	PJSM with H&P rig crews & TCI on RU casing running tool & RIH with 9 5/8" casing.	7,014.0	7,014.0		
21:00	1	22:00	INT, CASE & CMT	RU_CSG	NORMAL	Rig up TCI casing running tools & CRT.	7,014.0	7,014.0		
22:00	0.75	22:45	INT, CASE & CMT	MU_SHOE_TRK	NORMAL	Make up 9 5/8" casing 2 jt shoe track & test floats.	7,014.0	7,014.0		
22:45	7.25	06:00	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 9 5/8" 40# L-80 IC Int1 Csg F/128' - T/7,000', fill pipe on the fly and top off every 40 joints. Correct Displacement	7,014.0	7,014.0		

Drill Strings				
BHA #2 , INTERMEDIATE				
Bit Run	Drill Bit		Bit Type	Make
2	12 1/4, XS716, 3065		PDC	SMITH
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)	Depth Drilled By Bit (ft)
13/13/13/13/13/13/13/13/13	1.30	1-1-WT-A-1-0-NO-TD	46.75	5,025.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
46.75	5,025.00	107.5	1,989.0	7,014.0

Drill String Components										
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
185	DRILL PIPE			5	4.28	5,804.84	7,014.00	113,194.4	148	RIG
3	HWDP - SPIRALED			5	3.00	89.77	1,209.16	4,488.5	34	RIG
1	DRILLING JARS - HYDRAULIC			6 1/2	2.63	29.17	1,119.39		30	KNIGHT OIL TOOLS LLC
20	HWDP			5	3.00	598.74	1,090.22	29,937.0	30	RIG
1	SUB - XO			8	2.88	3.58	491.48		0	DRILLING TOOLS INTERNATIONAL
12	DRILL COLLAR			8	2.81	349.96	487.90		0	RIG
1	SUB - XO			8	2.88	3.76	137.94		0	DRILLING TOOLS INTERNATIONAL
1	SUB - FILTER			8	3.56	4.99	134.18		0	GE/BAKER HUGHES
1	SUB - SHOCK			8	3.25	19.68	129.19		0	KNIGHT OIL TOOLS LLC
1	DRILL COLLAR - NON MAG			8	3.25	29.01	109.51		0	DRILLING TOOLS INTERNATIONAL
1	MWD TOOL - NON-RETRIEVABLE			8	3.25	35.92	80.50		0	GE/BAKER HUGHES
1	STABILIZER			8	2.81	7.71	44.58		0	DRILLING TOOLS INTERNATIONAL
1	MOTOR - STABILIZER SLEEVE			9	3.00	35.55	36.87		0	PHOENIX

Mud Motors						
SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
PHX900079	1.5	SEALED	7:8	8.4		6.74

Comment

FLOWLINE TEMPERATURE - NO FLOW, CCI - NO PSI

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)	
11/28/2022 07:00	PIONEER DRILLING FLUIDS	WATER BASE	7,014.0	10.80	35	85.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
	2.000	1	2	20.0			
Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)		
16.0	5.2	0.2	0.0	0.500	0.2		
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH	
164,000	880.000	0	0/100		0.1	10.0	
Gel 10 sec (lb/100ft²)	Gel 10 min (lb/100ft²)	Gel 30 min (lb/100ft²)					
2.000	2.000	2.000					

Comment

CCI - NO PSI

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
11/24/2022 13:00	BOP	BOP'S, 11/22/2022 22:30	12/15/2022 13:00	Test BOP 5000 High /250 LOW

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	1,969.0	13.00

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/8/2022 11:00	SURFACE, 1,969.0ftKB	No	30.00	1,000.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
No Data			

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	106.0	106.0	20	H40	78.67		
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH	SUPERVISION	EA	1	1	0.0	6
BULK BENTONITE "GEL" - WYOMING BENTONITE	VISCOSIFIER	TON		2	18.56	31
BULK BARITE - BARIUM SULFATE	WEIGHTING MATERIAL	TON		4	34.74	103
SODA ASH	HARDNESS MODIFIER	LB SACK		10	14.0	131
LIME	ALKALINITY CONTROL	LB SACK		11	222.0	30
PAC LV	FLUID LOSS ADDITIVES	LB SACK		12	102.0	12
LIQUID XAN	VISCOSIFIER	GAL		100	330.0	955
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	2,100

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
No Data						

Deviation Surveys

Date	Description	Job
11/5/2022 22:00	AS DRILL SURVEY	ODR, 11/5/2022 19:00

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
267_0_SPBY_U_A1/267_0_SPBY	-5,440.0		8,429.0	8,610.0	
267_5_SPBY_M_A1	-5,753.0		8,742.0	9,002.0	
268_5_SPBY_L_A1	-5,984.0		8,973.0		
ALT_ICP2	-6,134.0		9,123.0		
268_5_SPBY_L_A2	-6,033.0		9,022.0		
268_5_SPBY_L_A3	-6,117.0		9,106.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,261.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,310.0		
ILP	-6,563.0		9,552.0		
PBHL/TD	-6,563.0		9,552.0		
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
JAY, JON, SUPERINTENDENT	SUPERINTENDENT	432-571-2454	432-234-2702	JON.JAY@PXD.COM
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@PXD.COM
SATTERFIELD, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-578-5339	JOHN.SATTERFIELD@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
WIEST, JUSTIN, MUD ENGINEER	MUD ENGINEER		308-249-2818	JUSTIN.WIEST@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM
Personnel Log				
Company				Count
PIONEER NATURAL RESOURCES USA INC				2
PIONEER NATURAL RESOURCES USA INC				1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO				14
MID CONTINENT WELL LOGGING SERVICE INC				2
STALLION SOLIDS CONTROL INC				1

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	532.00
Days Since RI:	532.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	11/30/2022
Report #:	10
DFS:	9
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$175,526.52

Daily Drilling Report

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262	Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date	
Jobs										
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype			Date		Note			
MILESTONE		ESTIMATED PAD RELEASE			2/9/2023		1st well on 6 well pad			
Daily Operations										
Footage/Meterage (ft) 10.00		Drilling Hours 0.25	% Rotating Time 0.00	End Depth (ftKB) 7,024.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$175,526.52		Cum Field Est To Date \$1,753,569.84	
24 HR ROP (ft/hr) 40.0	Circulating Hours 2.50	% Sliding Time 100.00	End Depth (TVD) (ftKB) 6,869.9	Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$3,100.00		Cum Mud Field Est \$85,469.89	Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 10.0		Daily Goal - Next 24 2,000.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB				
Avg Connection Gas 32.00		Avg Trip Gas 23.00	Avg Background Gas 22.00		Max Connection Gas 34.00		Max Trip Gas 26.00		Max Drill Gas 30.00	
Operations Summary Circ, Cmt 9 5/8" Int1 Csg, back out landing Jt, Install packoff & test, Install wear bushing, P/U DO BHA, TIH T/ FC, Test Csg, D/O shoe track, drill 10' new formation T/7,024', displace T/OBM, perform FIT, TOO H for 8.5" RSS BHA, L/D DO BHA, P/U 8.5" RSS BHA, TIH.										
Operations Next Report Period P/U 8.5" RSS BHA, TIH, drill 8.5" Vert. section T/9,143'+/-.										
Operations At Report Time Pick up 8.5" Baker RSS Assembly.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 0% Complete Production: 0% Complete Savor Sub 5,035'. Daily NPT:0 H&P: 2.25 3rd Party: 8.5 Pioneer: 0										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	0.5	06:30	INT, CASE & CMT	RD_CSG	NORMAL	Rig down casing running tools.	7,014.0	7,014.0		
06:30	0.5	07:00	INT, CASE & CMT	RU_CMT	NORMAL	R/U cement equipment.	7,014.0	7,014.0		
07:00	1.75	08:45	INT, CASE & CMT	CIRC	NORMAL	Circulate 1.5x casing capcity 8 BPM with Full Returns Rig down casing running tools.	7,014.0	7,014.0		
08:45	0.25	09:00	INT, CASE & CMT	SFTY	NORMAL	Held safety meeting with American cementers and rig crew.	7,014.0	7,014.0		
09:00	3	12:00	INT, CASE & CMT	CMT	NORMAL	Cement Int1 casing Single Stage Cement as follows: Test surface lines to 5,000 psi. Pump 50 bbl of 10.8 ppg spacer, Lead Cement 537 bbl (1,022 sks) of 11.0 ppg, 2.95 yld, Tail Cement 59 bbl (249 sks) of 14.8 ppg, 1.33 yld. Displace with 528 bbl FW water @ 8 bpm. slow to 4 bpm last 30 bbl of displacement. Final lift psi 1,380. Bump Plug @ 1,904 psi. Check Floats (Floats Held) 2.5 bbls back. Full Returnst, 50bbls spacer & 50bbls	7,014.0	7,014.0		

						of cmt to surface.				
12:00	0.25	12:15	INT, CASE & CMT	SFTY	NORMAL	PJSM with American Cementing & rig crew on rig down.	7,014.0	7,014.0		
12:15	0.25	12:30	INT, CASE & CMT	RD_CMT	NORMAL	R/D American cementers.	7,014.0	7,014.0		
12:30	0.25	12:45	INT, CASE & CMT	SFTY	NORMAL	PJSM with rig crews & Cactus tech	7,014.0	7,014.0		
12:45	0.75	13:30	INT, CASE & CMT	WH	NORMAL	L/D landing joint, flush well head, Installed & tested pack off to 5000 psi, checked lock downs with 40,000 overpull.	7,014.0	7,014.0		
13:30	0.25	13:45	PROD, PRE DRL	WRBSH	NORMAL	Install wear bushing.	7,014.0	7,014.0		
13:45	0.25	14:00	PROD, PRE DRL	SFTY	NORMAL	PJSM with rig crews & Baker directional.	7,014.0	7,014.0		
14:00	0.5	14:30	PROD, PRE DRL	PU_ DIR	NORMAL	P/U 8.75" DO BHA, Baker D/O assembly, with 8.75" Ulterra 611.	7,014.0	7,014.0		
14:30	3.5	18:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/123' T/6,539' with proper displacement.	7,014.0	7,014.0		
18:00	0.25	18:15	PROD, PRE DRL	HDL_ROT HD	NORMAL	Pull trip nipple, Intstall Rotating head.	7,014.0	7,014.0		
18:15	1	19:15	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/6,539' T/6,913', with proper displacement. (P/U Stds) (Tag FC @ 6,913')	7,014.0	7,014.0		
19:15	0.75	20:00	PROD, PRE DRL	CIRC	NORMAL	Fill pipe & break circ.	7,014.0	7,014.0		
20:00	0.75	20:45	PROD, PRE DRL	CSG_TEST	NORMAL	Test csg T/2,500 psi.(Test good). 30 min.	7,014.0	7,014.0		
20:45	1.25	22:00	PROD, PRE DRL	DRL_OUT	NORMAL	Drill out cement & shoe track F/6,913' T/7,000', RPM:20, GPM's:450, WOB:3-12, TQ:5K. F/C: 6,913' Shoe 7,000' Rat hole 7,014'	7,014.0	7,014.0		
22:00	0.25	22:15	PROD, PRE DRL	DRL	NORMAL	Drill 10' New Formation F/7,014' T/7,024', (10' @ 40 fph), WOB:10, RPM:20, GPM:450, SPP:1,500 psi, Diff:150 psi, TQ:6K, with full returns.	7,014.0	7,024.0		
22:15	1.5	23:45	PROD, PRE DRL	CIRC	NORMAL	Circulate BU, displace hole w/OBM prior to FIT.	7,024.0	7,024.0		
23:45	0.25	00:00	PROD, PRE DRL	FIT	NORMAL	Perform FIT to EMW: 9.5, Good test. AMW: 8.6 ppg TVD: 6,846' PSI: 320 psi	7,024.0	7,024.0		
00:00	0.25	00:15	PROD, DRL	FLOW_CHK	NORMAL	Flow check, well static, pump slug.	7,024.0	7,024.0		
00:15	1.75	02:00	PROD, DRL	TOOH_ELEV	NORMAL	TOOH F/7,024' T/4,000, hole taking proper fill. (Change breaks on DP & HWDP).	7,024.0	7,024.0		
02:00	0.5	02:30	PROD, DRL	RIG_SVC	NORMAL	Rig service.	7,024.0	7,024.0		
02:30	2	04:30	PROD, DRL	TOOH_ELEV	NORMAL	TOOH F/4,000' T/BHA, hole taking proper fill.	7,024.0	7,024.0		
04:30	0.25	04:45	PROD, DRL	SFTY	NORMAL	PJSM with Baker & rig crew on changing BHA.	7,024.0	7,024.0		
04:45	0.5	05:15	PROD, DRL	HDL_BHA	NORMAL	Lay down DO BHA #2.	7,024.0	7,024.0		
05:15	0.75	06:00	PROD, DRL	PU_ DIR	NORMAL	Pick up 8.5" Baker RSS BHA #3. Bit:8.5" Baker, DD506TSX RSS:6.75" AutoTrak	7,024.0	7,024.0		

Drill Strings

BHA #3 , DRILL OUT

Bit Run	Drill Bit		Bit Type	Make
3	8 3/4, CF611, 63983		PDC	ULTERRA
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)	Depth Drilled By Bit (ft)
13/13/13/13/13/13	0.78	1-1-NO-A-0-0-NO-BHA	0.25	10.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
0.25	10.00	40.0	7,014.0	7,024.0

Drill String Components								
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
200	DRILL PIPE	5	4.28	6,343.53	7,024.00	123,698.8	155	RIG
21	HWDP - SPIRALED	5	3.00	628.34	680.47	31,417.0	31	RIG
1	SUB - FILTER	6 11/16	3.31	4.21	52.13		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	43.03	47.92		0	GE/BAKER HUGHES
1	SUB -BIT	6 3/4	3.50	3.99	4.89		0	RIG

Mud Motors						
SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15022846	0	SEALED	7:8	6.4		10.5

Sensors		
Sensor Type	Sensor-Bit (ft)	Note
12		

Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
20:00	20:45	7,014.0	0.00		16	0	0.0	447	1,238.0	0.0	179	179	179	179	6.0	6.0	
20:45	22:00	7,014.0	0.00		2	0	0.0	447	1,097.0	0.0	191	191	191	191	5.0	5.0	
22:00	22:15	7,014.0	10.00	40.0	26	0	298.1	449	1,809.0	40.0	168	168	168	168	8.0	8.0	
22:30	23:30	7,024.0	0.00		0	0	0.0	448	1,487.0	0.0	198	198	198	198	5.0	5.0	

Hydraulic Calculations										
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.50	8.59	68.7	1.1	184.8	263.0	12.5	398.4	118.63	1.63	359.89

Mud Checks													
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)	
11/29/2022 20:00		PIONEER DRILLING FLUIDS			OIL BASE	7,014.0		8.50		50		50.0	
pV (cP)	YP (lb/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	3.000		3	4			8.0		250.0		500.0		
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
10.0		9.3											
Chlorides (mg/L)			Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH
12,000			2,400.000		0		75.6/24.4		314.0		1.4		
Gel 10 sec (lb/100ft²)					Gel 10 min (lb/100ft²)					Gel 30 min (lb/100ft²)			
3.000					5.000					6.000			

Comment

Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
11/29/2022 07:00		PIONEER DRILLING FLUIDS			OIL BASE	7,014.0	8.50	48		50.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	3.000	2	3			8.6		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
10.0					9.3						
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
13,000		2,400.000		0		76.7/23.3		302.0		1.6	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)			
2.000				5.000				6.000			

Last BOP Test				
Date	Test Type	Item Tested		Com
11/24/2022 13:00	BOP	BOP'S, 11/22/2022 22:30		Test BOP 5000 High /250 LOW

Leak Off and Formation Integrity Tests		
Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	1,969.0	13.00
FORMATION INTEGRITY	7,000.0	9.50

Casing Pressure Test						
Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/8/2022 11:00	SURFACE, 1,969.0ftKB	No	30.00	1,000.0
CASING	STANDARD	11/29/2022 20:00	INTERMEDIATE, 7,000.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths			
Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
No Data			

Casing Strings							
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	106.0	106.0	20	H40	78.67		
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	3,378.7

Cement						
Cement Fluids						
Fluid Type	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)	
SPACER	29.8	29.8			10.80	
Fluid Type	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)	
LEAD CMT	29.8	6,500.0	Class C	2.95	11.00	
Fluid Type	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)	
TAIL CMT	6,500.0	7,000.0	Class C	1.33	14.80	
Fluid Type	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)	
DSPLMT	29.8	7,000.0			8.34	

Cement Stages							
Description		Final Top Depth	Btm (ftKB)	Top Pl...	Btm Pl...		
9 5/8" Intermediate		29.8	7,000.0	Yes			
Q Pump Init	Q Pump Final	Q Pump Avg	P Pump Final	P Plug Bump	Float	Recip?	Rotated?
3	3	7	1,380.0	1,904.0	No	No	No

INTERMEDIATE CASING CEMENT casing 11/29/2022 09:00			
Cmtg End Date	Wellbore	Technical Result	Comment
11/29/2022 12:00	ORIGINAL	SUCCESS	

Gas Emissions - Flare					
Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL	14946	0		Mud Diesel	14,946	0
DIESEL	FUEL	GAL	0	906		Rig fuel	15,547	13528

Mud Additive Amounts						
Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
TRUCKING	MISCELLANEOUS	EA	1	1	0.0	13
DRILLING FLUID TECH	SUPERVISION	EA	2	2	0.0	8

TECH SERVICE SUPPORT		SUPERVISION		EA	350	350	0.0	2,450
Pump Operations								
Pump #	Make	Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER	PZ-11-1600	5 1/2		11.00	0.081		7,500.0
2	GARDNER-DENVER	PZ-11-1600	5 1/2		11.00	0.081		7,500.0
3	GARDNER-DENVER	PZ-11-1600	5 1/2		11.00	0.081		7,500.0
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data								
Deviation Surveys								
Date		Description			Job			
11/5/2022 22:00		AS DRILL SURVEY			ODR, 11/5/2022 19:00			
Formations								
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)		Final Top (TVD) (ftKB)
267_0_SPBY_U_A1/267_0_SPBY		-5,440.0			8,429.0	8,610.0		
267_5_SPBY_M_A1		-5,753.0			8,742.0	9,002.0		
268_5_SPBY_L_A1		-5,984.0			8,973.0			
ALT_ICP2		-6,134.0			9,123.0			
268_5_SPBY_L_A2		-6,033.0			9,022.0			
268_5_SPBY_L_A3		-6,117.0			9,106.0			
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,261.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,310.0			
ILP		-6,563.0			9,552.0			
PBHL/TD		-6,563.0			9,552.0			
269_0_DEAN		-6,639.0			9,628.0			
304_0_STRAWN		-8,065.0			11,054.0			
Daily Contacts								
Job Contact		Title		Office	Mobile	Email		
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM		
SPACEK, KYLE, ENGINEER		ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER		ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM		
TRANSIER, KENNETH, SUPERINTENDENT		SUPERINTENDENT			318-481-3868	KENNETH.TRANSIER@PXD.COM		
SATTERFIELD, JOHN, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			337-578-5339	JOHN.SATTERFIELD@PXD.COM		
HEFNER, KENNETH, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-559-9070	KENNETH.HEFNER@PXD.COM		
WIEST, JUSTIN, MUD ENGINEER		MUD ENGINEER			308-249-2818	JUSTIN.WIEST@PXD.COM		
RIG-H&P 417, RIG PHONE		RIG PHONE		361-489-3691		DL-HP417@PXD.COM		
Personnel Log								
Company								Count
PIONEER NATURAL RESOURCES USA INC								2
PIONEER NATURAL RESOURCES USA INC								1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO								13
MID CONTINENT WELL LOGGING SERVICE INC								2
STALLION SOLIDS CONTROL INC								1

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:533.00

Days Since RI:533.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:12/01/2022

Report #:11

DFS:10

AFE #:9019715

Total AFE + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$164,808.72

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date
Jobs										
Responsible Grp 2			Responsible Grp 3			Job Type	Start Date		End Date	Job Status
DRL ENG - JACKIE LUTHER			AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype				Date		Note		
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad		
Daily Operations										
Footage/Meterage (ft) 1,794.00		Drilling Hours 12.00	% Rotating Time 100.00		End Depth (ftKB) 8,818.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$164,808.72		Cum Field Est To Date \$1,913,714.95
24 HR ROP (ft/hr) 149.5	Circulating Hours 8.25	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,652.2		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$6,646.20		Cum Mud Field Est \$92,116.09	Total AFE + Sup \$3,910,360.88
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,000.0			Daily Goal - Next 24 3,000.0			Goal Comments Goal not met	
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB				
Avg Connection Gas 38.00		Avg Trip Gas 22.00		Avg Background Gas 22.00		Max Connection Gas 46.00		Max Trip Gas 32.00		Max Drill Gas 75.00
Operations Summary P/U 8.5" RSS BHA, TIH, slip & cut, drill 8.5" Prod Vert. F/7,024' T/8,818'. SD: 8,604', Inc: 0.03°, Amz: 197.51°, Avg DLS:1.96°, Above:1', Left:7'.										
Operations Next Report Period Drill 8.5" Prod Vert T/9,108', build curve & land @ 10,043'+/-, Drill Lat. w/Baker RSS.										
Operations At Report Time Drilling 8.5" Prod Vert. @ 8,818'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 86% Complete Production: 0% Complete Savor Sub 6,829'. Daily NPT:0 H&P: 2.25 3rd Party: 8.5 Pioneer: 0										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	0.25	06:15	PROD, PRE DRL	PU_DIR	NORMAL	Pick up 8.5" Baker RSS BHA #3. Bit:8.5" Baker, DD506TSX RSS:6.75" AutoTrak	7,024.0	7,024.0		
06:15	1.75	08:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/BHA T/1,824', with proper displacemnet.	7,024.0	7,024.0		
08:00	0.5	08:30	PROD, PRE DRL	RIG_SVC	NORMAL	Rig service.	7,024.0	7,024.0		
08:30	1.25	09:45	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/1,824 T/2,959', with proper displacemnet.	7,024.0	7,024.0		
09:45	1.25	11:00	PROD, PRE DRL	CIRC	NORMAL	Fill pipe and downlink to the tool. Lost power to trailers while downlinking. Unable to downlink at this time.	7,024.0	7,024.0		
11:00	0.75	11:45	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/2,959 T/4,469', with proper displacemnet.	7,024.0	7,024.0		
11:45	0.5	12:15	PROD, PRE DRL	CIRC	NORMAL	Fill pipe and downlink to the tool.	7,024.0	7,024.0		
12:15	2	14:15	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/4,469 T/6,925', with proper displacemnet. P/U DP @ 6,547'.	7,024.0	7,024.0		
14:15	1	15:15	PROD, PRE DRL	SLIP_CUT	NORMAL	Slip and cut drilling line.	7,024.0	7,024.0		
15:15	0.75	16:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/6,925' T/7,024', with proper displacemnet. P/U DP F/6,547'.	7,024.0	7,024.0		
16:00	0.75	16:45	PROD, PRE DRL	CIRC	NORMAL	Downlink Baker RSS tool.	7,024.0	7,024.0		
16:45	13.25	06:00	PROD, PRE DRL	DRL	NORMAL	Drill 8.5" Prod Vert. w/Baker RSS F/7,024' T/8,818', (1,794' @ 136fph), WOB:30, GPM:575, SPP:2,400, Diff:800, RPM:40, TQ:12K, with full returns. SD:	7,024.0	8,818.0		

						8,604', Inc: 0.03°, Amz: 197.51°, Avg DLS:1.96°, Above:1', Left:7'.												
Drill Strings																		
BHA #4 , PRODUCTION - VERTICAL/CURVE/LATERAL																		
Bit Run		Drill Bit					Bit Type			Make								
		4 8 1/2, DD506TSX, 5337347					PDC			GE/BAKER HUGHES								
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull			Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)									
12/12/12/14/14/14		0.78		-----			12.00		1,794.00									
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)			Depth In (ftKB)		Depth Out (ftKB)									
12.00		1,794.00		149.5			7,024.0		8,818.0									
Drill String Components																		
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make							
633	DRILL PIPE			5	4.28	8,695.47	8,818.00	169,561.7	170		RIG							
1	SUB - FILTER			6 11/16	3.31	4.21	122.53		0		GE/BAKER HUGHES							
1	MOTOR - STABILIZER SLEEVE			7	3.00	43.03	118.32		0		GE/BAKER HUGHES							
1	SUB - SHOCK			7	3.00	26.48	75.29		0		TOMAX							
1	STABILIZER			7.024	2.30	10.70	48.81		0		GE/BAKER HUGHES							
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	28.07	38.11		0		GE/BAKER HUGHES							
1	RSS TOOL			7	4.33	9.34	10.04		0		GE/BAKER HUGHES							
Mud Motors																		
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend						
15022846		0		SEALED		7:8		6.4				10.5						
Sensors																		
Sensor Type			Sensor-Bit (ft)				Note											
GAMMA			12.24															
DIRECTIONAL			22.31															
Drilling Parameters																		
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)	
09:45	10:00	7,024.0	0.00		0	0	0.0	315	298.0	0.0	95	95	95	95	0.0	0.0		
10:00	11:45	7,024.0	0.00		0	0	0.0	544	1,680.0	0.0	108	108	108	108	0.0	0.0		
11:45	12:00	7,024.0	0.00		59	0	0.0	545	1,829.0	0.0	129	129	129	129	0.0	0.0		
12:00	12:15	7,024.0	0.00		53	0	0.0	551	1,870.0	0.0	140	140	140	140	0.0	0.0		
12:15	16:45	7,024.0	0.00		60	0	0.0	544	1,822.0	0.0	128	128	128	128	0.0	0.0		
16:45	18:00	7,024.0	88.00	70.4	25	31	321.6	577	2,644.0	86.0	155	155	155	155	8.0	8.0		
18:00	18:15	7,112.0	8.00	32.0	27	40	372.8	577	2,672.0	96.0	156	156	156	156	8.0	8.0		
18:15	18:30	7,120.0	10.00	40.0	18	40	0.0	577	2,046.0	45.0	164	164	164	164	7.0	7.0		
18:30	18:45	7,130.0	0.00		2	0	0.0	575	2,265.0	0.0	180	180	180	180	4.0	4.0		
18:45	19:00	7,130.0	0.00		0	0	0.0	313	974.0	0.0	186	186	186	186	5.0	5.0		
19:00	19:15	7,130.0	0.00		0	0	0.0	573	2,008.0	0.0	183	183	183	183	4.0	4.0		
19:15	19:45	7,130.0	76.00	152.0	25	40	486.0	573	2,754.0	163.0	155	155	155	155	9.0	9.0		
19:45	20:00	7,206.0	14.00	56.0	25	40	466.4	573	2,735.0	143.0	158	158	158	158	8.0	8.0		
20:00	20:15	7,220.0	0.00		1	0	0.0	573	2,148.0	0.0	181	181	181	181	4.0	4.0		
20:15	20:45	7,220.0	48.00	96.0	27	40	556.2	573	2,824.0	189.0	154	154	154	154	10.0	10.0		
20:45	21:00	7,268.0	32.00	128.0	23	40	596.8	573	2,866.0	233.0	155	155	155	155	10.0	10.0		
21:00	21:30	7,300.0	95.00	190.0	25	40	558.2	573	2,825.0	192.0	155	155	155	155	9.0	9.0		
21:30	22:00	7,395.0	94.00	188.0	21	40	464.9	573	2,731.0	171.0	160	160	160	160	9.0	9.0		
22:00	22:15	7,489.0	10.00	40.0	25	40	492.7	573	2,762.0	119.0	158	158	158	158	8.0	8.0		
22:15	22:30	7,499.0	0.00		0	0	0.0	573	2,172.0	0.0	190	190	190	190	4.0	4.0		
22:30	23:00	7,499.0	84.00	168.0	21	40	494.3	573	2,760.0	190.0	159	159	159	159	10.0	10.0		
23:00	23:30	7,583.0	94.00	188.0	20	40	545.4	573	2,812.0	191.0	161	161	161	161	10.0	10.0		
23:30	23:45	7,677.0	77.00	308.0	23	40	786.4	573	3,054.0	247.0	157	157	157	157	11.0	11.0		
23:45	00:00	7,754.0	17.00	68.0	26	40	568.9	573	2,975.0	241.0	162	162	162	162	10.0	10.0		
00:00	00:45	7,771.0	94.00	125.3	21	40	248.2	573	2,650.0	142.0	170	170	170	170	8.0	8.0		
00:45	01:30	7,865.0	95.00	126.7	21	40	302.1	573	2,706.0	136.0	170	170	170	170	9.0	9.0		
01:30	02:00	7,960.0	93.00	186.0	26	40	557.4	573	2,962.0	224.0	165	165	165	165	11.0	11.0		
02:00	02:30	8,053.0	94.00	188.0	17	40	364.4	573	2,767.0	184.0	174	174	174	174	9.0	9.0		
02:30	03:00	8,147.0	95.00	190.0	23	40	630.4	573	3,035.0	241.0	168	168	168	168	11.0	11.0		
03:00	03:30	8,242.0	94.00	188.0	25	40	511.2	573	2,937.0	242.0	177	177	177	177	9.0	9.0		
03:30	04:00	8,336.0	94.00	188.0	26	40	521.2	573	2,946.0	217.0	176	176	176	176	10.0	10.0		
04:00	04:15	8,430.0	94.00	376.0	26	40	643.8	573	3,070.0	284.0	176	176	176	176	10.0	10.0		
04:15	04:30	8,524.0	24.00	96.0	24	40	587.5	573	3,013.0	233.0	180	180	180	180	10.0	10.0		
04:30	05:00	8,548.0	71.00	142.0	19	40	479.3	573	2,902.0	204.0	182	182	182	182	10.0	10.0		
05:00	06:00	8,619.0	199.00	199.0	19	40	479.3	573	2,902.0	204.0	182	182	182	182	10.0	10.0		
Hydraulic Calculations																		
Dens Mud (lb/gal)		ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)				
8.75		8.88	146.3		2.6	235.0	437.7	16.1		515.8		155.61	89.20	360.53				
Mud Checks																		
Time			Mud Company			Type	Depth (ftKB)	Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)					

11/30/2022 19:00		PIONEER DRILLING FLUIDS			OIL BASE	7,233.0	8.75	56	92.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	6.000	3	4		8.4		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)
9.5		8.4								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)	Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
13,000		2,400.000		0	76.8/23.2		322.0		1.4	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)			Gel 30 min (lb/100ft²)			
3.000				5.000			6.000			
Comment										
Mud Checks										
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)
11/30/2022 14:00		PIONEER DRILLING FLUIDS			OIL BASE	7,025.0	8.75	57		55.0
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	7.000	3	4		8.4		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)
9.5		8.4								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)	Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
12,500		2,400.000		0	76.8/23.2		313.0		1.4	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)			Gel 30 min (lb/100ft²)			
3.000				5.000			6.000			
Comment										
Last BOP Test										
Date		Test Type	Item Tested			Next Test Date		Com		
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests										
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)		
FORMATION INTEGRITY					1,969.0			13.00		
FORMATION INTEGRITY					7,000.0			9.50		
Casing Pressure Test										
Test Type	Test Subtype	Date		Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/8/2022 11:00		SURFACE, 1,969.0ftKB			No	30.00	1,000.0	
CASING	STANDARD	11/29/2022 20:00		INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0	
Kick Offs & Key Depths										
Date		Type	Top Depth (ftKB)			Depth Top (TVD) (ftKB)				
No Data										
Casing Strings										
Description	Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0		106.0		20	H40	78.67			
SURFACE	1,969.0		1,968.0		13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0		6,846.6		9 5/8	L80-IC	40.00	BTC	3,378.7	
Gas Emissions - Flare										
Type		Method		Dur (Min)		Amount		Units	Com	
No Data										
Job Supply Amounts										
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed	
DIESEL		FUEL	GAL	7498	1923		Rig fuel	21,122	15451	
Mud Additive Amounts										
Des				Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH				SUPERVISION		EA	2	2	0.0	10
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL		TON		4.74	30.0	108
CALCIUM CHLORIDE				CALCIUM CHLORIDE		LB SACK		10	326.0	10
LIME				ALKALINITY CONTROL		LB SACK		10	212.0	40
PMDHYPDF-A200				SHAKER SCREEN		EA		12	38.0	12
DD LEM				LOW END MODIFIER		GAL		100	1,550.0	100
DDF MUL				ALL IN ONE EMULSIFIER		GAL		100	1,550.0	100
TECH SERVICE SUPPORT				SUPERVISION		EA	350	350	0.0	2,800
DIESEL - FOR MUD				OIL MUD ADDITIVE		GAL	22448	8902	13,546.0	8,902
Pump Operations										
Pump #	Make			Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
2	GARDNER-DENVER			PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
3	GARDNER-DENVER			PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
Pump Checks										
Pump #	Depth (ftKB)		Time		P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
1	8,537.0		12/1/2022 04:00		660.0	30		97		95
1	8,537.0		12/1/2022 04:00		480.0	30		97		95
1	8,537.0		12/1/2022 04:00		570.0	30		97		95
2	8,537.0		12/1/2022 04:00		660.0	30		97		95
2	8,537.0		12/1/2022 04:00		560.0	30		97		95
2	8,537.0		12/1/2022 04:00		480.0	30		97		95

Deviation Surveys							
Date		Description			Job		
11/5/2022 22:00		AS DRILL SURVEY			ODR, 11/5/2022 19:00		
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
7,089.00	13.51	56.76	6,933.02	-97.62	399.76	1,189.89	3.17
7,183.00	12.30	84.68	7,024.74	-99.69	406.71	1,209.06	6.69
7,278.00	11.01	85.19	7,117.78	-96.68	408.41	1,228.18	1.36
7,372.00	11.25	85.66	7,210.01	-93.67	409.86	1,246.27	0.27
7,467.00	7.40	112.87	7,303.78	-88.42	408.18	1,261.16	6.06
7,561.00	6.89	115.20	7,397.05	-81.20	403.43	1,271.83	0.62
7,656.00	6.95	103.59	7,491.36	-74.92	399.65	1,282.58	1.47
7,751.00	6.88	89.82	7,585.68	-70.88	398.32	1,293.86	1.74
7,846.00	1.77	65.13	7,680.38	-69.78	398.95	1,300.88	5.60
7,940.00	1.45	334.37	7,774.36	-71.22	400.64	1,301.68	2.45
8,035.00	1.44	319.20	7,869.33	-73.46	402.63	1,300.38	0.40
8,130.00	1.08	328.98	7,964.30	-75.39	404.30	1,299.14	0.44
8,224.00	1.69	344.82	8,058.28	-77.62	406.39	1,298.32	0.76
8,319.00	1.45	321.52	8,153.24	-80.12	408.69	1,297.21	0.71
8,414.00	1.46	323.80	8,248.21	-82.33	410.60	1,295.75	0.06
8,509.00	1.30	322.90	8,343.18	-84.45	412.44	1,294.38	0.17
8,604.00	0.03	197.51	8,438.17	-85.42	413.28	1,293.72	1.39
Formations							
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
267_5_SPBY_M_A1		-5,753.0			8,742.0	9,002.0	
268_5_SPBY_L_A1		-5,984.0			8,973.0		
ALT_ICP2		-6,134.0			9,123.0		
268_5_SPBY_L_A2		-6,033.0			9,022.0		
268_5_SPBY_L_A3		-6,117.0			9,106.0		
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,261.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,310.0		
ILP		-6,563.0			9,552.0		
PBHL/TD		-6,563.0			9,552.0		
269_0_DEAN		-6,639.0			9,628.0		
304_0_STRAWN		-8,065.0			11,054.0		
Daily Contacts							
Job Contact		Title		Office	Mobile	Email	
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM	
SPACEK, KYLE, ENGINEER		ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM	
LUTHER, JACKIE, ENGINEER		ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM	
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM	
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM	
SUMPTER, BILLY, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM	
HEFNER, KENNETH, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-559-9070	KENNETH.HEFNER@PXD.COM	
TRUPE, CODY, MUD ENGINEER		MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM	
RIG-H&P 417, RIG PHONE		RIG PHONE		361-489-3691		DL-HP417@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
PIONEER NATURAL RESOURCES USA INC							1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
MID CONTINENT WELL LOGGING SERVICE INC							2
STALLION SOLIDS CONTROL INC							1

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	535.00
Days Since RI:	535.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/03/2022
Report #:	13
DFS:	12
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$146,533.15

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)					
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00			Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date	
Jobs														
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status	
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)														
Type		Subtype					Date		Note					
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad					
Daily Operations														
Footage/Meterage (ft) 2,967.00		Drilling Hours 24.00		% Rotating Time 100.00		End Depth (ftKB) 13,455.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$146,533.15		Cum Field Est To Date \$2,149,012.51		
24 HR ROP (ft/hr) 123.6	Circulating Hours	% Sliding Time 0.00	End Depth (TVD) (ftKB) 9,541.3		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$10,989.55		Cum Mud Field Est \$124,024.78		Total AFE + Sup \$3,910,360.88			
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,500.0				Daily Goal - Next 24 2,800.0				Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB						Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB						
Avg Connection Gas 83.00		Avg Trip Gas 0.00		Avg Background Gas 90.00			Max Connection Gas 151.00		Max Trip Gas 0.00		Max Drill Gas 151.00			
Operations Summary Drill Prod Lat. w/Baker RSS T/13,455'. SD: 13,239', Inc: 91.27°, Amz: 164.92°, Avg DLS:.090°, Below:1', Right:1'.														
Operations Next Report Period Drill Lat. w/Baker RSS.														
Operations At Report Time Drilling 8.5" Prod Lat @ 13,455'.														
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 22% Complete Savor Sub 11,466'. Daily NPT:0 H&P: 2.25 3rd Party: 8.5 Pioneer: 0														
Time Log														
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #
06:00	24	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lat. w/Baker RSS F/10,488' T/13,455', (2,967' @ 124 fph), WOB:20-40, GPM:600-625, SPP:3,300, Diff:900, RPM:110, TQ:16K, with full returns. SD: 13,239', Inc: 91.27°, Amz: 164.92°, Avg DLS:.090°, Below:1', Right:1'.			10,488.0		13,455.0			
Drill Strings														
BHA #4 , PRODUCTION - VERTICAL/CURVE/LATERAL														
Bit Run 4 8 1/2, DD506TSX, 5337347			Drill Bit					Bit Type		Make				
						PDC		GE/BAKER HUGHES						
Nozzles (1/32") 12/12/12/14/14/14			Bit Total Fluid Area (nozzles) (in²) 0.78			IADC Bit Dull -----		Hours Drilled By Bit (hr) 58.00		Depth Drilled By Bit (ft) 6,431.00				
BHA Drilling Time (hr) 58.00			BHA Depth Drilled (ft) 6,431.00			BHA ROP (ft/hr) 110.9		Depth In (ftKB) 7,024.0		Depth Out (ftKB) 13,455.0				
Drill String Components														
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make		
423	DRILL PIPE				5	4.28	13,332.47	13,455.00	259,983.2	260		RIG		
1	SUB - FILTER				6 3/4	3.31	4.21	122.53		0		GE/BAKER HUGHES		
1	MOTOR - STABILIZER SLEEVE				7	3.00	43.03	118.32		0		GE/BAKER HUGHES		
1	SUB - SHOCK				7	3.00	26.48	75.29		0		TOMAX		

1	STABILIZER	7	2.30	10.70	48.81		0	GE/BAKER HUGHES									
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.07	38.11		0	GE/BAKER HUGHES									
1	RSS TOOL	7	4.33	9.34	10.04		0	GE/BAKER HUGHES									
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages									
15022846		0		SEALED		7:8		6.4									
Sensors																	
Sensor Type			Sensor-Bit (ft)			Note											
GAMMA			12.24														
DIRECTIONAL			22.31														
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	07:45	10,488.0	30.00	17.1	8	85	29.0	599	2,653.0	31.0	208	208	208	208	9.0	9.0	
07:45	10:15	10,518.0	95.00	38.0	12	92	155.4	599	2,781.0	39.0	206	206	206	206	9.0	9.0	
10:15	11:45	10,613.0	94.00	62.7	23	100	291.0	599	2,917.0	72.0	195	195	195	195	11.0	11.0	
11:45	12:15	10,707.0	95.00	190.0	25	109	498.0	598	3,125.0	171.0	193	193	193	193	13.0	13.0	
12:15	13:15	10,802.0	94.00	94.0	30	110	303.2	598	3,058.0	102.0	194	194	194	194	11.0	11.0	
13:15	14:00	10,896.0	94.00	125.3	33	117	307.5	598	3,060.0	140.0	192	192	192	192	12.0	12.0	
14:00	14:30	10,990.0	95.00	190.0	38	97	510.5	618	3,373.0	187.0	184	184	184	184	14.0	14.0	
14:30	15:00	11,085.0	94.00	188.0	39	97	682.9	617	3,547.0	228.0	183	183	183	183	14.0	14.0	
15:00	16:00	11,179.0	101.00	101.0	40	103	620.5	617	3,484.0	169.0	182	182	182	182	14.0	14.0	
16:00	16:15	11,280.0	87.00	348.0	42	109	605.0	617	3,614.0	262.0	179	179	179	179	16.0	16.0	
16:15	17:00	11,367.0	95.00	126.7	40	106	446.9	617	3,455.0	150.0	182	182	182	182	13.0	13.0	
17:00	17:30	11,462.0	94.00	188.0	37	106	365.0	618	3,370.0	166.0	186	186	186	186	13.0	13.0	
17:30	18:15	11,556.0	94.00	125.3	39	50	572.0	617	3,580.0	196.0	183	183	183	183	14.0	14.0	
18:15	18:45	11,650.0	94.00	188.0	39	50	580.1	617	3,588.0	186.0	182	182	182	182	14.0	14.0	
18:45	19:15	11,744.0	94.00	188.0	39	50	525.6	617	3,653.0	182.0	178	178	178	178	15.0	15.0	
19:15	20:00	11,838.0	94.00	125.3	39	50	461.1	618	3,587.0	156.0	178	178	178	178	14.0	14.0	
20:00	20:30	11,932.0	94.00	188.0	39	50	527.4	618	3,653.0	172.0	177	177	177	177	15.0	15.0	
20:30	21:15	12,026.0	94.00	125.3	39	67	542.0	618	3,668.0	185.0	177	177	177	177	15.0	15.0	
21:15	21:45	12,120.0	97.00	194.0	39	107	524.1	618	3,650.0	195.0	178	178	178	178	15.0	15.0	
21:45	22:00	12,217.0	20.00	80.0	39	91	171.6	618	3,381.0	78.0	182	182	182	182	11.0	11.0	
22:00	22:15	12,237.0	47.00	188.0	40	69	477.5	618	3,628.0	188.0	177	177	177	177	15.0	15.0	
22:15	22:30	12,284.0	25.00	100.0	40	109	554.7	617	3,705.0	240.0	175	175	175	175	17.0	17.0	
22:30	23:00	12,309.0	93.00	186.0	35	98	392.4	618	3,540.0	201.0	182	182	182	182	15.0	15.0	
23:00	23:30	12,402.0	102.00	204.0	39	78	554.0	617	3,704.0	200.0	178	178	178	178	15.0	15.0	
23:30	00:15	12,504.0	94.00	125.3	39	83	526.9	618	3,678.0	180.0	178	178	178	178	15.0	15.0	
00:15	00:45	12,598.0	94.00	188.0	39	82	601.7	617	3,753.0	202.0	178	178	178	178	15.0	15.0	
00:45	01:15	12,692.0	94.00	188.0	39	96	453.5	617	3,687.0	182.0	180	180	180	180	15.0	15.0	
01:15	02:00	12,786.0	94.00	125.3	39	70	425.9	617	3,660.0	154.0	179	179	179	179	14.0	14.0	
02:00	06:00	12,880.0	575.00	143.8	39	70	425.9	617	3,660.0	160.0	179	179	179	179	14.0	14.0	
Hydraulic Calculations																	
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)						
8.30	8.56	173.3		3.1	253.0	481.4	17.3	650.4	237.97	294.53	360.53						
Mud Checks																	
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)								
12/2/2022 18:00		PIONEER DRILLING FLUIDS			OIL BASE	11,633.0	8.30	64	119.0								
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)			HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)						
	9.000	4	5				10.4		250.0		500.0						
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)							
10.0		8.8															
Chlorides (mg/L)			Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH					
22,000			3,600.000		0		75.6/24.4		583.0		4.3						
Gel 10 sec (lbf/100ft²)					Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)								
7.000					11.000				13.000								
Comment																	
Mud Checks																	
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)								
12/2/2022 07:30		PIONEER DRILLING FLUIDS			OIL BASE	10,511.0	8.20	58	115.0								
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)			HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)						
	7.000	3	4				10.4		250.0		500.0						
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)							
9.5		8.2															
Chlorides (mg/L)			Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH					
24,000			4,000.000		0		79.6/20.4		652.0		4.2						
Gel 10 sec (lbf/100ft²)					Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)								
4.000					5.000				7.000								
Comment																	

Last BOP Test								
Date	Test Type	Item Tested		Next Test Date		Com		
11/24/2022 13:00	BOP	BOP'S, 11/22/2022 22:30		12/15/2022 13:00		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests								
Test Type			Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY			1,969.0		13.00			
FORMATION INTEGRITY			7,000.0		9.50			
Casing Pressure Test								
Test Type	Test Subtype	Date	Item Tested		Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/8/2022 11:00	SURFACE, 1,969.0ftKB		No	30.00	1,000.0	
CASING	STANDARD	11/29/2022 20:00	INTERMEDIATE, 7,000.0ftKB		No	30.00	2,500.0	
Kick Offs & Key Depths								
Date		Type	Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
12/1/2022 09:30		KICK OFF	9,043.0		8,877.1			
12/1/2022 22:45		HEEL	10,236.0		9,527.9			
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0	106.0	20	H40	78.67			
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	3,378.7	
Gas Emissions - Flare								
Type	Method	Dur (Min)		Amount		Units	Com	
No Data								
Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL	7467	2946		Rig fuel	24,017	20023
DIESEL	MUD	GAL	7182	4143		Mud Diesel	16,166	20173
Mud Additive Amounts								
Des		Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH		SUPERVISION		EA	1	1	0.0	12
BULK BARITE - BARIUM SULFATE		WEIGHTING MATERIAL		TON		6	24.0	114
DD WET		WETTING AGENT		GAL		10	1,090.0	10
LIME		ALKALINITY CONTROL		LB SACK		50	100.0	152
CALCIUM CHLORIDE		CALCIUM CHLORIDE		LB SACK		98	157.0	179
DD LEM		LOW END MODIFIER		GAL		150	950.0	700
DDF MUL		ALL IN ONE EMULSIFIER		GAL		275	825.0	825
TECH SERVICE SUPPORT		SUPERVISION		EA	350	350	0.0	3,500
DIESEL - FOR MUD		OIL MUD ADDITIVE		GAL	7182	4143	16,166.0	20,173
Pump Operations								
Pump #	Make		Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081		7,500.0
2	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081		7,500.0
3	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081		7,500.0
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)		Eff (%)	
1	13,169.0	12/3/2022 03:30	480.0	30	97		95	
1	13,169.0	12/3/2022 03:30	530.0	40	129		95	
1	13,169.0	12/3/2022 03:30	625.0	50	161		95	
2	13,169.0	12/3/2022 03:30	610.0	50	161		95	
2	13,169.0	12/3/2022 03:30	470.0	30	97		95	
2	13,169.0	12/3/2022 03:30	530.0	40	129		95	
Deviation Surveys								
Date		Description		Job				
11/5/2022 22:00		AS DRILL SURVEY		ODR, 11/5/2022 19:00				
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
10,494.00	90.93	168.90	9,522.38	1,031.60	-663.54	1,591.87	13.96	
10,589.00	90.50	170.24	9,521.20	1,126.39	-756.96	1,609.06	1.48	
10,684.00	89.24	169.71	9,521.41	1,221.15	-850.51	1,625.60	1.44	
10,778.00	88.87	170.10	9,522.97	1,314.90	-943.04	1,642.07	0.57	
10,872.00	89.05	170.22	9,524.67	1,408.63	-1,035.65	1,658.14	0.23	
10,967.00	88.93	167.74	9,526.35	1,503.47	-1,128.87	1,676.29	2.61	
11,062.00	90.87	165.42	9,526.51	1,598.45	-1,221.27	1,698.34	3.18	
11,156.00	88.87	165.81	9,526.73	1,692.44	-1,312.31	1,721.69	2.17	
11,251.00	89.02	166.00	9,528.47	1,787.43	-1,404.44	1,744.82	0.25	
11,345.00	88.44	166.30	9,530.56	1,881.40	-1,495.68	1,767.32	0.69	
11,440.00	88.69	165.89	9,532.94	1,976.37	-1,587.87	1,790.14	0.51	
11,534.00	89.52	165.57	9,534.41	2,070.36	-1,678.96	1,813.31	0.95	
11,629.00	89.58	166.29	9,535.15	2,165.35	-1,771.10	1,836.40	0.76	
11,723.00	89.46	166.64	9,535.94	2,259.35	-1,862.49	1,858.40	0.39	

11,817.00	89.46	166.72	9,536.82	2,353.33	-1,953.96	1,880.05	0.09
11,912.00	89.21	166.67	9,537.93	2,448.32	-2,046.40	1,901.92	0.27
12,006.00	89.52	166.25	9,538.97	2,542.31	-2,137.78	1,923.92	0.56
12,100.00	89.42	166.20	9,539.84	2,636.30	-2,229.07	1,946.30	0.12
12,195.00	89.09	165.43	9,541.07	2,731.29	-2,321.17	1,969.58	0.88
12,290.00	89.02	165.87	9,542.64	2,826.28	-2,413.19	1,993.12	0.47
12,385.00	89.79	165.91	9,543.63	2,921.27	-2,505.32	2,016.28	0.81
12,480.00	89.67	165.06	9,544.07	3,016.27	-2,597.29	2,040.09	0.90
12,575.00	89.64	165.55	9,544.65	3,111.26	-2,689.18	2,064.19	0.52
12,669.00	89.49	165.89	9,545.36	3,205.26	-2,780.27	2,087.37	0.40
12,764.00	89.79	166.02	9,545.96	3,300.26	-2,872.43	2,110.43	0.34
12,859.00	89.36	164.76	9,546.66	3,395.25	-2,964.35	2,134.39	1.40
12,954.00	90.41	165.83	9,546.85	3,490.24	-3,056.24	2,158.50	1.58
13,049.00	89.73	165.65	9,546.74	3,585.24	-3,148.31	2,181.91	0.74
13,144.00	89.89	166.55	9,547.05	3,680.24	-3,240.53	2,204.73	0.96
13,239.00	91.27	164.92	9,546.09	3,775.22	-3,332.59	2,228.13	2.25

Formations					
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP	-6,563.0		9,552.0		
PBHL/TD	-6,563.0		9,552.0		
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-813-0762	BILLY.SUMPTER@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
TRUPE, CODY, MUD ENGINEER	MUD ENGINEER		405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:536.00

Days Since RI:536.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:12/04/2022

Report #:14

DFS:13

AFE #:9019715

Total AFE + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$128,580.00

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date
Jobs										
Responsible Grp 2			Responsible Grp 3			Job Type	Start Date		End Date	Job Status
DRL ENG - JACKIE LUTHER			AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype				Date		Note		
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad		
Daily Operations										
Footage/Meterage (ft) 3,025.00		Drilling Hours 19.00	% Rotating Time 97.37		End Depth (ftKB) 16,480.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$128,580.00		Cum Field Est To Date \$2,268,723.30
24 HR ROP (ft/hr) 159.2	Circulating Hours 3.50	% Sliding Time 2.63	End Depth (TVD) (ftKB) 9,575.6		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$6,324.67		Cum Mud Field Est \$130,349.45	Total AFE + Sup \$3,910,360.88
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,800.0			Daily Goal - Next 24 1,000.0			Goal Comments Goal Met	
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB				
Avg Connection Gas 86.00		Avg Trip Gas 0.00		Avg Background Gas 87.00		Max Connection Gas 140.00		Max Trip Gas 0.00		Max Drill Gas 149.00
Operations Summary Drill Prod Lat. w/Baker RSS T/16,480', trouble shoot Baker RSS, TOH for DTF. SD: 16,455', Inc: 91.52°, Amz: 167.93°, Avg DLS:.096°, Above:3', Right:1'.										
Operations Next Report Period TOH for RSS DTF, change BHA, TIH, Drill Lat. w/Baker RSS.										
Operations At Report Time TOH for RSS DTF @ 16,480'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 43% Complete Savor Sub 14,491'. Daily NPT:4.5 H&P: 2.25 3rd Party: 13 Pioneer: 0										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	19	01:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lat. w/Baker RSS F/13,455' T/16,480', (3,025' @ 159 fph), WOB:20-40, GPM:600-625, SPP:3,300, Diff:900, RPM:110, TQ:16K, with full returns. SD: 16,455', Inc: 91.52°, Amz: 167.93°, Avg DLS:.096°, Above:3', Right:1'.	13,455.0	16,480.0		
01:00	0.5	01:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service & change in-line screen.	16,480.0	16,480.0		
01:30	1	02:30	PROD, DRL LAT	3RD_PTY	NORMAL	Trouble shoot Baker RSS tool.	16,480.0	16,480.0	1.00	4
02:30	2	04:30	PROD, DRL LAT	3RD_PTY	NORMAL	Circulate Btms up 2X, clean hole prior to TOH for RSS DTF.	16,480.0	16,480.0	2.00	4
04:30	0.25	04:45	PROD, DRL LAT	3RD_PTY	NORMAL	Flow check, well static.	16,480.0	16,480.0	0.25	4
04:45	0.5	05:15	PROD, DRL LAT	3RD_PTY	NORMAL	TOH 10 stds wet F/16,480' T/15,539', hole taking proper fill.	16,480.0	16,480.0	0.50	4
05:15	0.25	05:30	PROD, DRL LAT	3RD_PTY	NORMAL	Flow check, well static, pump slug.	16,480.0	16,480.0	0.25	4
05:30	0.5	06:00	PROD, DRL LAT	3RD_PTY	NORMAL	TOH for RSS F/15,539' T/14,500', hole taking proper fill. (L/D single jt DP changing breaks)	16,480.0	16,480.0	0.50	4
Interval Problems										
DIRECTIONAL, 16,480.0ftKB, 12/4/2022 01:30										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description		Est Cost OR (Cost)	Accountable Party		Comment

4		No	ROTARY STEERABLE	FAILURE - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	RSS steering head failure.										
Drill Strings																	
BHA #4 , PRODUCTION - VERTICAL/CURVE/LATERAL																	
Bit Run		Drill Bit				Bit Type		Make									
4		8 1/2, DD506TSX, 5337347				PDC		GE/BAKER HUGHES									
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)									
12/12/12/14/14/14		0.78		-----		77.00		9,456.00									
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)									
77.00		9,456.00		122.8		7,024.0		16,480.0									
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
514	DRILL PIPE			5	4.28	16,357.47	16,480.00	318,970.7	319	RIG							
1	SUB - FILTER			6 3/4	3.31	4.21	122.53		0	GE/BAKER HUGHES							
1	MOTOR - STABILIZER SLEEVE			7	3.00	43.03	118.32		0	GE/BAKER HUGHES							
1	SUB - SHOCK			7	3.00	26.48	75.29		0	TOMAX							
1	STABILIZER			7	2.30	10.70	48.81		0	GE/BAKER HUGHES							
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	28.07	38.11		0	GE/BAKER HUGHES							
1	RSS TOOL			7	4.33	9.34	10.04		0	GE/BAKER HUGHES							
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend					
15022846		0		SEALED		7:8		6.4				10.5					
Sensors																	
Sensor Type				Sensor-Bit (ft)				Note									
GAMMA				12.24													
DIRECTIONAL				22.31													
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:30	13,455.0	91.00	182.0	42	110	405.5	617	3,703.0	132.0	182	182	182	182	14.0	14.0	
06:30	07:15	13,546.0	94.00	125.3	41	110	329.3	617	3,625.0	152.0	185	185	185	185	14.0	14.0	
07:15	07:45	13,640.0	81.00	162.0	41	110	631.8	617	3,942.0	245.0	177	177	177	177	18.0	18.0	
07:45	08:15	13,721.0	14.00	28.0	0	0	0.0	309	1,299.0	0.0	238	238	238	238	9.0	9.0	
08:15	08:45	13,735.0	99.00	198.0	42	110	713.4	616	3,935.0	228.0	176	176	176	176	16.0	16.0	
08:45	09:30	13,834.0	94.00	125.3	41	110	572.9	617	3,794.0	137.0	176	176	176	176	15.0	15.0	
09:30	10:00	13,928.0	94.00	188.0	42	110	676.3	617	3,897.0	192.0	177	177	177	177	16.0	16.0	
10:00	11:15	14,022.0	98.00	78.4	41	105	448.6	617	3,667.0	126.0	177	177	177	177	15.0	15.0	
11:15	11:45	14,120.0	93.00	186.0	36	100	521.4	617	3,835.0	193.0	182	182	182	182	16.0	16.0	
11:45	12:15	14,213.0	95.00	190.0	41	120	487.8	617	3,802.0	152.0	176	176	176	176	17.0	17.0	
12:15	13:00	14,308.0	94.00	125.3	37	120	266.0	617	3,576.0	153.0	182	182	182	182	16.0	16.0	
13:00	13:30	14,402.0	95.00	190.0	41	120	593.3	617	3,907.0	236.0	177	177	177	177	18.0	18.0	
13:30	14:15	14,497.0	94.00	125.3	41	115	494.3	617	3,808.0	160.0	176	176	176	176	17.0	17.0	
14:15	14:45	14,591.0	94.00	188.0	41	110	555.3	617	3,870.0	204.0	177	177	177	177	18.0	18.0	
14:45	15:15	14,685.0	96.00	192.0	42	110	430.8	616	3,814.0	167.0	181	181	181	181	16.0	16.0	
15:15	15:45	14,781.0	21.00	42.0	40	110	80.2	617	3,457.0	94.0	185	185	185	185	14.0	14.0	
15:45	16:15	14,802.0	74.00	148.0	42	110	361.8	615	3,744.0	156.0	181	181	181	181	15.0	15.0	
16:15	17:00	14,876.0	94.00	125.3	40	110	285.5	615	3,666.0	146.0	183	183	183	183	15.0	15.0	
17:00	17:45	14,970.0	94.00	125.3	42	110	381.0	615	3,763.0	144.0	181	181	181	181	15.0	15.0	
17:45	18:30	15,064.0	94.00	125.3	41	110	339.7	615	3,722.0	158.0	182	182	182	182	16.0	16.0	
18:30	19:00	15,158.0	95.00	190.0	41	110	539.9	615	3,860.0	243.0	181	181	181	181	17.0	17.0	
19:00	19:15	15,253.0	94.00	376.0	41	110	587.2	615	3,908.0	238.0	181	181	181	181	17.0	17.0	
19:15	19:45	15,347.0	97.00	194.0	41	110	601.4	615	3,922.0	210.0	181	181	181	181	17.0	17.0	
19:45	20:15	15,444.0	94.00	188.0	41	110	676.3	615	3,997.0	221.0	181	181	181	181	17.0	17.0	
20:15	21:00	15,538.0	95.00	126.7	42	110	566.5	618	3,953.0	158.0	181	181	181	181	16.0	16.0	
21:00	21:30	15,633.0	94.00	188.0	41	110	565.3	618	4,075.0	264.0	177	177	177	177	18.0	18.0	
21:30	22:00	15,727.0	94.00	188.0	41	110	517.1	618	4,027.0	203.0	176	176	176	176	18.0	18.0	
22:00	22:15	15,821.0	95.00	380.0	41	110	596.7	618	4,107.0	236.0	177	177	177	177	18.0	18.0	
22:15	23:00	15,916.0	94.00	125.3	41	110	551.2	618	4,060.0	191.0	177	177	177	177	17.0	17.0	
23:00	23:15	16,010.0	94.00	376.0	40	110	631.7	618	4,141.0	271.0	178	178	178	178	18.0	18.0	
23:15	23:45	16,104.0	94.00	188.0	39	110	606.7	618	4,183.0	310.0	178	178	178	178	19.0	19.0	
23:45	00:00	16,198.0	95.00	380.0	40	110	612.7	618	4,189.0	270.0	177	177	177	177	19.0	19.0	
00:00	00:30	16,293.0	94.00	188.0	34	110	395.1	618	3,967.0	220.0	183	183	183	183	17.0	17.0	
00:30	01:00	16,387.0	93.00	186.0	41	110	663.8	618	4,241.0	255.0	175	175	175	175	19.0	19.0	
01:00	01:15	16,480.0	0.00		0	0	0.0	605	3,596.0	0.0	222	222	222	222	9.0	9.0	
01:15	01:30	16,480.0	0.00		0	0	0.0	603	3,348.0	0.0	217	217	217	217	7.0	7.0	
01:30	01:45	16,480.0	0.00		0	34	0.0	619	3,324.0	0.0	221	221	221	221	8.0	8.0	
01:45	04:30	16,480.0	0.00		0	34	0.0	619	3,324.0	0.0	221	221	221	221	8.0	8.0	
Hydraulic Calculations																	
Dens Mud (lb/gal)		ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)		Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)	

8.25	8.57	173.9	3.1	253.9	481.6	17.3	652.5	291.70	433.37	360.53	
Mud Checks											
Time 12/3/2022 17:30		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 15,050.0	Density (lb/gal) 8.25	Funnel Viscosity (s/qt) 59		T Flowline (° F) 118.0	
pV (cP)	YP (lb/100ft²) 9.000	Vis 3rpm 4	Vis 6rpm 5	Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 12.0		HTHP Temperature (° F) 250.0		HTHP Pressure (psi) 500.0	
Solids (%) 7.5		Low Gravity Solids (%) 6.3			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
Chlorides (mg/L) 21,000		Calcium (mg/L) 3,200.000		CaCl (ppm) 0		Oil Water Ratio 74.1/25.9		Electric Stab (V) 561.0		Lime (lb/bbl) 3.3	pH
Gel 10 sec (lb/100ft²) 7.000				Gel 10 min (lb/100ft²) 10.000				Gel 30 min (lb/100ft²) 12.000			
Comment											
Mud Checks											
Time 12/3/2022 09:30		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 13,942.0	Density (lb/gal) 8.45	Funnel Viscosity (s/qt) 63		T Flowline (° F) 116.0	
pV (cP)	YP (lb/100ft²) 9.000	Vis 3rpm 4	Vis 6rpm 4	Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 12.0		HTHP Temperature (° F) 250.0		HTHP Pressure (psi) 500.0	
Solids (%) 9.0		Low Gravity Solids (%) 7.8			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
Chlorides (mg/L) 21,000		Calcium (mg/L) 3,200.000		CaCl (ppm) 0		Oil Water Ratio 73.6/26.4		Electric Stab (V) 508.0		Lime (lb/bbl) 3.0	pH
Gel 10 sec (lb/100ft²) 6.000				Gel 10 min (lb/100ft²) 9.000				Gel 30 min (lb/100ft²) 12.000			
Comment											
Last BOP Test											
Date		Test Type	Item Tested			Next Test Date		Com			
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW			
Leak Off and Formation Integrity Tests											
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)			
FORMATION INTEGRITY					1,969.0			13.00			
FORMATION INTEGRITY					7,000.0			9.50			
Casing Pressure Test											
Test Type	Test Subtype	Date			Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00	1,000.0	
CASING	STANDARD	11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0	
Kick Offs & Key Depths											
Date		Type			Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
12/1/2022 09:30		KICK OFF			9,043.0			8,877.1			
12/1/2022 22:45		HEEL			10,236.0			9,527.9			
Casing Strings											
Description	Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)		
CONDUCTOR	106.0		106.0		20	H40	78.67				
SURFACE	1,969.0		1,968.0		13 3/8	J55	54.50	BTC	1,328.9		
INTERMEDIATE	7,000.0		6,846.6		9 5/8	L80-IC	40.00	BTC	3,378.7		
Gas Emissions - Flare											
Type		Method			Dur (Min)		Amount	Units	Com		
No Data											
Job Supply Amounts											
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc	Cum Consumed		
DIESEL	MUD	GAL	7490	9234		Mud Diesel (Ticket #50111)		14,422	29407		
DIESEL	FUEL	GAL	0	3603		Rig fuel		20,414	23626		
Mud Additive Amounts											
Des			Type			Units	Rec	Consumed	On Loc	Cum Cons	
PMDHYPDF-A200			SHAKER SCREEN			EA		1	43.0	13	
DRILLING FLUID TECH			SUPERVISION			EA	1	1	0.0	13	
DD TONE			ORGANOPHILLIC CLAY			LB SACK		12	68.0	82	
CALCIUM CHLORIDE			CALCIUM CHLORIDE			LB SACK		41	116.0	220	
LIME			ALKALINITY CONTROL			LB SACK		50	50.0	202	
DDF MUL			ALL IN ONE EMULSIFIER			GAL		95	730.0	920	
DD LEM			LOW END MODIFIER			GAL		125	825.0	825	
TECH SERVICE SUPPORT			SUPERVISION			EA	350	350	0.0	3,850	
DIESEL - FOR MUD			OIL MUD ADDITIVE			GAL		9234	6,932.0	29,407	
Pump Operations											
Pump #	Make			Model		Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
2	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
3	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0	
Pump Checks											
Pump #	Depth (ftKB)		Time		P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)	
2	15,822.0		12/3/2022 18:00		638.0	40		129		95	
2	15,822.0		12/3/2022 18:00		588.0	30		97		95	

2	15,822.0	12/3/2022 18:00	745.0	50	161	95
3	15,822.0	12/3/2022 18:00	650.0	40	129	95
3	15,822.0	12/3/2022 18:00	601.0	30	97	95
3	15,822.0	12/3/2022 18:00	729.0	50	161	95

Deviation Surveys

Date	Description	Job
11/5/2022 22:00	AS DRILL SURVEY	ODR, 11/5/2022 19:00

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
13,525.00	90.13	165.70	9,545.14	4,061.21	-3,610.06	2,297.41	0.61
13,620.00	88.41	166.14	9,546.35	4,156.20	-3,702.19	2,320.51	1.87
13,715.00	88.53	165.53	9,548.88	4,251.17	-3,794.27	2,343.75	0.65
13,810.00	88.53	165.83	9,551.32	4,346.13	-3,886.29	2,367.24	0.32
13,905.00	88.16	165.89	9,554.06	4,441.09	-3,978.37	2,390.44	0.39
14,000.00	88.65	165.44	9,556.71	4,536.06	-4,070.38	2,413.95	0.70
14,095.00	88.50	164.60	9,559.07	4,631.01	-4,162.12	2,438.50	0.90
14,190.00	89.21	165.63	9,560.97	4,725.98	-4,253.91	2,462.90	1.32
14,285.00	88.81	164.95	9,562.61	4,820.96	-4,345.78	2,487.02	0.83
14,379.00	89.02	166.56	9,564.39	4,914.94	-4,436.87	2,510.14	1.73
14,473.00	89.09	166.31	9,565.94	5,008.93	-4,528.24	2,532.19	0.28
14,568.00	88.72	166.77	9,567.76	5,103.90	-4,620.61	2,554.30	0.62
14,663.00	88.62	166.69	9,569.96	5,198.87	-4,713.05	2,576.10	0.13
14,758.00	88.72	166.59	9,572.17	5,293.83	-4,805.45	2,598.04	0.15
14,852.00	88.50	165.44	9,574.45	5,387.80	-4,896.64	2,620.75	1.25
14,947.00	89.46	166.33	9,576.14	5,482.79	-4,988.76	2,643.92	1.38
15,042.00	89.46	165.77	9,577.03	5,577.78	-5,080.95	2,666.82	0.59
15,136.00	89.46	166.01	9,577.92	5,671.78	-5,172.11	2,689.73	0.26
15,231.00	90.29	165.34	9,578.13	5,766.78	-5,264.15	2,713.24	1.12
15,325.00	89.70	166.44	9,578.13	5,860.77	-5,355.32	2,736.15	1.33
15,419.00	89.61	165.56	9,578.70	5,954.77	-5,446.52	2,758.89	0.94
15,514.00	90.72	165.56	9,578.43	6,049.77	-5,538.52	2,782.58	1.17
15,609.00	90.84	166.78	9,577.13	6,144.76	-5,630.75	2,805.29	1.29
15,703.00	90.35	167.15	9,576.16	6,238.73	-5,722.33	2,826.49	0.65
15,797.00	89.83	165.79	9,576.01	6,332.73	-5,813.71	2,848.48	1.55
15,892.00	90.63	165.60	9,575.63	6,427.72	-5,905.77	2,871.95	0.87
15,987.00	88.99	165.86	9,575.94	6,522.72	-5,997.83	2,895.37	1.75
16,082.00	89.27	165.25	9,577.39	6,617.71	-6,089.82	2,919.06	0.71
16,176.00	89.24	164.57	9,578.61	6,711.68	-6,180.57	2,943.53	0.72
16,271.00	90.13	165.61	9,579.13	6,806.67	-6,272.37	2,967.97	1.44
16,366.00	90.97	165.80	9,578.22	6,901.67	-6,364.42	2,991.43	0.91
16,455.00	91.52	167.93	9,576.28	6,990.63	-6,451.07	3,011.65	2.47

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-813-0762	BILLY.SUMPTER@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
TRUPE, CODY, MUD ENGINEER	MUD ENGINEER		405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417

Accept:11/22/2022

Release:

Days Since LTI:537.00

Days Since RI:537.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:12/05/2022

Report #:15

DFS:14

AFE #:9019715

Total AFE + Sup:\$3,910,360.88

Daily Field Est. (Cost):\$98,210.53

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)				
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date	
Jobs													
Responsible Grp 2				Responsible Grp 3			Job Type	Start Date		End Date	Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)													
Type		Subtype					Date		Note				
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad				
Daily Operations													
Footage/Meterage (ft) 445.00		Drilling Hours 3.25		% Rotating Time 100.00		End Depth (ftKB) 16,925.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$98,210.53		Cum Field Est To Date \$2,366,933.83	
24 HR ROP (ft/hr) 136.9		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 9,574.4		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$4,350.00		Cum Mud Field Est \$134,699.45	Total AFE + Sup \$3,910,360.88
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 1,000.0				Daily Goal - Next 24 3,000.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 7,000.0ftKB						Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB				
Avg Connection Gas 121.00			Avg Trip Gas 40.00		Avg Background Gas 112.00			Max Connection Gas 134.00		Max Trip Gas 53.00		Max Drill Gas 156.00	
Operations Summary TOH, change BHA, TIH w/8.5" RSS BHA,W&R F/15,472' T/16,480', Drill Prod Lat. w/Baker RSS T/16,925'. SD: 16,721', Inc: 90.12°, Amz: 165.78°, Avg DLS:0.98°, Above:4', Right:8'.													
Operations Next Report Period Drill Lat. w/Baker RSS.													
Operations At Report Time Drilling 8.5" Prod Lat @ 16,925'.													
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 45% Complete Savor Sub 14,936'. Daily NPT:20.75 H&P: 2.25 3rd Party: 33.75 Pioneer: 0													
Time Log													
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #	
06:00	7	13:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for RSS F/14,500' T/BHA, hole taking proper fill. (L/D single change breaks on DP)			16,480.0	16,480.0	7.00	4	
13:00	0.25	13:15	PROD, DRL LAT	SFTY	NORMAL	PJSM with rig & Baker on L/D BHA.			16,480.0	16,480.0	0.25	4	
13:15	1	14:15	PROD, DRL LAT	LD_DIR	NORMAL	L/D RSS BHA.			16,480.0	16,480.0	1.00	4	
14:15	0.25	14:30	PROD, DRL LAT	SFTY	NORMAL	PJSM with rig & Baker on P/U BHA.			16,480.0	16,480.0	0.25	4	
14:30	1	15:30	PROD, DRL LAT	PU_ DIR	NORMAL	P/U 8.5" Lateral RSS BHA			16,480.0	16,480.0	1.00	4	
15:30	1.5	17:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH w/8.5" Lat RSS BHA, F/118' T/3,019', with proper displacement.			16,480.0	16,480.0	1.50	4	
17:00	0.5	17:30	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Remove trip nipple & install Rot. Head.			16,480.0	16,480.0	0.50	4	
17:30	0.75	18:15	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH w/8.5" Lat RSS BHA, F/3,019' T/4,617', with proper displacement.			16,480.0	16,480.0	0.75	4	
18:15	0.5	18:45	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service & perform drop inspection.			16,480.0	16,480.0	0.50	4	
18:45	6.25	01:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH w/8.5" Lat RSS BHA, F/4,617' T/15,472', with proper displacement.			16,480.0	16,480.0	6.25	4	
01:00	1.75	02:45	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash & Ream F/15,472' T/16,480', GPM:600, SPP:3,200, RPM:80 TQ:13K.			16,480.0	16,480.0	1.75	4	
02:45	3.25	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lat. w/Baker RSS F/16,480' T/16,925' (445' @ 137 fph), WOB:40, GPM:615,			16,480.0	16,925.0			

						SPP:3,500, Diff:800, RPM:110, TQ:22K, with full returns. SD: 16,721', Inc: 90.12°, Amz: 165.78°, Avg DLS:.0.98°, Above:4', Right:8'.				
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Interval Problems

DIRECTIONAL, 16,480.0ftKB, 12/4/2022 01:30

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
4	25.25	No	ROTARY STEERABLE	FAILURE - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	RSS steering head failure, TOH & change RSS.

Drill Strings

BHA #4 , PRODUCTION - VERTICAL/CURVE/LATERAL

Bit Run	Drill Bit				Bit Type		Make
4	8 1/2, DD506TSX, 5337347				PDC		GE/BAKER HUGHES
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull	Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)
12/12/12/14/14/14		0.78		1-2-CT-S-X-0-NO-DTF	77.00		9,456.00
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)	Depth In (ftKB)		Depth Out (ftKB)
77.00		9,456.00		122.8	7,024.0		16,480.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
3	HWDP - SPIRALED	5	3.00	88.84	16,480.00	4,442.0	322	RIG
516	DRILL PIPE	5	4.28	16,268.63	16,391.16	317,238.3	317	RIG
1	SUB - FILTER	6 3/4	3.31	4.21	122.53		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	43.03	118.32		0	GE/BAKER HUGHES
1	SUB - SHOCK	7	3.00	26.48	75.29		0	TOMAX
1	STABILIZER	7	2.30	10.70	48.81		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.07	38.11		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.34	10.04		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15022846	0	SEALED	7:8	6.4		10.5

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.24	
DIRECTIONAL	22.31	

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit				Bit Type		Make
5	8 1/2, DD506TSX, 5333548				PDC		GE/BAKER HUGHES
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull	Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)
12/12/12/14/14/14		0.78		-----	3.25		445.00
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)	Depth In (ftKB)		Depth Out (ftKB)
3.25		445.00		136.9	16,480.0		16,925.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
18	HWDP - SPIRALED	5	3.00	538.09	16,925.00	26,904.5	344	RIG
516	DRILL PIPE	5	4.28	16,268.63	16,386.91	317,238.3	317	RIG
1	SUB - FILTER	6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	43.18	114.07		0	GE/BAKER HUGHES
1	SUB - SHOCK	7	3.00	26.48	70.89		0	TOMAX
1	STABILIZER	6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.27	38.31		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.34	10.04		0	GE/BAKER HUGHES

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.24	
DIRECTIONAL	22.31	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
02:45	03:15	16,480.0	44.00	88.0	35	100	534.3	611	3,935.0	151.0	191	191	191	191	16.0	16.0	
03:15	03:45	16,524.0	49.00	98.0	34	100	501.6	618	4,114.0	174.0	184	184	184	184	17.0	17.0	
03:45	04:30	16,573.0	81.00	108.0	41	110	406.3	615	4,020.0	123.0	187	187	187	187	18.0	18.0	
04:30	05:00	16,654.0	91.00	182.0	43	110	618.7	614	4,233.0	279.0	186	186	186	186	22.0	22.0	
05:00	06:00	16,745.0	180.00	180.0	43	110	618.7	614	4,233.0	279.0	186	186	186	186	22.0	22.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.50	8.87	174.9	3.1	251.8	488.2	17.2	647.3	294.82	453.93	360.53

Mud Checks

Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
12/4/2022 19:00		PIONEER DRILLING FLUIDS			OIL BASE	16,480.0	8.50	69		55.0	
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	

	10.000	4	4		6.0	250.0	500.0						
Solids (%)	9.0	Low Gravity Solids (%)			7.9	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)				
Chlorides (mg/L)	20,000	Calcium (mg/L)		3,200.000	CaCl (ppm)	0	Oil Water Ratio	74.7/25.3	Electric Stab (V)	496.0	Lime (lb/bbl)	2.3	pH
Gel 10 sec (lb/100ft²)					7.000	Gel 10 min (lb/100ft²)			10.000	Gel 30 min (lb/100ft²)			13.000
Comment													
CCI - NO PSI													
Mud Checks													
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)			
12/4/2022 10:00		PIONEER DRILLING FLUIDS			OIL BASE	16,480.0	8.35	64		65.0			
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)			
	8.000	3	4			6.0		250.0		500.0			
Solids (%)	8.5	Low Gravity Solids (%)			7.4	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)				
Chlorides (mg/L)	19,500	Calcium (mg/L)		3,200.000	CaCl (ppm)	0	Oil Water Ratio	74.9/25.1	Electric Stab (V)	508.0	Lime (lb/bbl)	2.5	pH
Gel 10 sec (lb/100ft²)					6.000	Gel 10 min (lb/100ft²)			9.000	Gel 30 min (lb/100ft²)			11.000
Comment													
CCI - NO PSI													
Last BOP Test													
Date		Test Type	Item Tested				Next Test Date		Com				
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30				12/15/2022 13:00		Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests													
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)					
FORMATION INTEGRITY						1,969.0		13.00					
FORMATION INTEGRITY						7,000.0		9.50					
Casing Pressure Test													
Test Type	Test Subtype	Date			Item Tested			Failed?	Time (min)		P (psi)		
CASING	STANDARD	11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00		1,000.0		
CASING	STANDARD	11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00		2,500.0		
Kick Offs & Key Depths													
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)					
12/1/2022 09:30			KICK OFF		9,043.0			8,877.1					
12/1/2022 22:45			HEEL		10,236.0			9,527.9					
Casing Strings													
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)	
CONDUCTOR		106.0		106.0		20	H40	78.67					
SURFACE		1,969.0		1,968.0		13 3/8	J55	54.50		BTC		1,328.9	
INTERMEDIATE		7,000.0		6,846.6		9 5/8	L80-IC	40.00		BTC		3,378.7	
Gas Emissions - Flare													
Type		Method			Dur (Min)		Amount		Units		Com		
No Data													
Job Supply Amounts													
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note			Cum On Loc		Cum Consumed	
DIESEL		FUEL	GAL	7512	1124		Rig fuel			26,802		24750	
DIESEL		MUD	GAL	7190	3774		Mud Diesel (Ticket #50157)			17,838		33181	
Mud Additive Amounts													
Des				Type			Units	Rec	Consumed	On Loc	Cum Cons		
TRUCKING				MISCELLANEOUS			EA	1	1	0.0	14		
DRILLING FLUID TECH				SUPERVISION			EA	1	1	0.0	14		
BACKHAUL				MISCELLANEOUS			PER LOAD	1	1	0.0	1		
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL			TON		7	17.0	121		
TECH SERVICE SUPPORT				SUPERVISION			EA	350	350	0.0	4,200		
DIESEL - FOR MUD				OIL MUD ADDITIVE			GAL	7490	3774	10,648.0	33,181		
Pump Operations													
Pump #	Make			Model		Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)			
1	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0			
2	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0			
3	GARDNER-DENVER			PZ-11-1600		5 1/2	11.00	0.081		7,500.0			
Pump Checks													
Pump #	Depth (ftKB)		Time			P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)		
1	16,560.0		12/5/2022 03:30			510.0	40		129		95		
1	16,560.0		12/5/2022 03:30			420.0	30		97		95		
1	16,560.0		12/5/2022 03:30			620.0	50		161		95		
2	16,560.0		12/5/2022 03:30			430.0	30		97		95		
2	16,560.0		12/5/2022 03:30			510.0	40		129		95		
2	16,560.0		12/5/2022 03:30			620.0	50		161		95		
Deviation Surveys													
Date				Description			Job						

11/5/2022 22:00			AS DRILL SURVEY		ODR, 11/5/2022 19:00		
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
16,540.00	90.18	168.62	9,575.02	7,075.54	-6,534.28	3,028.92	1.77
16,631.00	90.00	167.16	9,574.88	7,166.48	-6,623.25	3,048.01	1.62
16,721.00	90.12	165.78	9,574.79	7,256.48	-6,710.75	3,069.06	1.54
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)		Final Top (TVD) (ftKB)
269_0_DEAN	-6,639.0			9,628.0			
304_0_STRAWN	-8,065.0			11,054.0			
Daily Contacts							
Job Contact			Title		Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER			ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER			ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT			SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT			SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			432-559-9070	KENNETH.HEFNER@PXD.COM
TRUPE, CODY, MUD ENGINEER			MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE			RIG PHONE		361-489-3691		DL-HP417@PXD.COM
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
PIONEER NATURAL RESOURCES USA INC							1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
BAKER HUGHES OILFIELD OPERATIONS INC							2
MID CONTINENT WELL LOGGING SERVICE INC							2
STALLION SOLIDS CONTROL INC							1

H & P 417

Accept: 11/22/2022

Release:

Days Since LTI: 538.00

Days Since RI: 538.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 12/06/2022

Report #: 16

DFS: 15

AFE #: 9019715

Total AFE + Sup: \$3,910,360.88

Daily Field Est. (Cost): \$126,145.58

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)				Field Name SPRABERRY (TREND AREA)			
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date
Jobs												
Responsible Grp 2				Responsible Grp 3			Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)												
Type		Subtype					Date		Note			
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad			
Daily Operations												
Footage/Meterage (ft) 2,645.00		Drilling Hours 24.00		% Rotating Time 98.96		End Depth (ftKB) 19,570.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$126,145.58		Cum Field Est To Date \$2,503,096.94
24 HR ROP (ft/hr) 110.2	Circulating Hours	% Sliding Time 1.04	End Depth (TVD) (ftKB) 9,566.5		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$12,117.61		Cum Mud Field Est \$146,817.06		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 3,000.0				Daily Goal - Next 24 3,000.0			Goal Comments Goal not met	
Backbuild Yes	Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 7,000.0ftKB					Next Casing String PROPOSED PRODUCTION, 25,107.0ftKB				
Avg Connection Gas 95.00		Avg Trip Gas 65.00		Avg Background Gas 91.00		Max Connection Gas 165.00		Max Trip Gas 136.00		Max Drill Gas 182.00		
Operations Summary Drill Prod Lat. w/Baker RSS T/19,570'. SD: 19,260', Inc: 90.15°, Amz: 166.23°, Avg DLS:1.46°, Above:11', Right:10'.												
Operations Next Report Period Drill Lat. w/Baker RSS.												
Operations At Report Time Drilling 8.5" Prod Lat @ 19,570'.												
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 63% Complete Savor Sub 17,581'. Daily NPT:0 H&P: 2.25 3rd Party: 33.75 Pioneer: 0												
Time Log												
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	16.5	22:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lat. w/Baker RSS F/16,925' T/18,527' (1,602' @ 97 fph), WOB:20-40, GPM:615, SPP:3,500, Diff:300-500, RPM:110, TQ:22K, with full returns. Control drill F/16,990' T/17236' to correct a deflection			16,925.0	18,527.0		
22:30	0.5	23:00	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.			18,527.0	18,527.0		
23:00	7	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/18,527' T/19,570' (1,043' @ 149 fph), WOB:45, GPM:615, SPP:4,000, Diff:500-800, RPM:80-110, TQ:22K, with full returns. SD: 19,260', Inc: 90.15°, Amz: 166.23°, Avg DLS:1.46°, Above:11', Right:10'.			18,527.0	19,570.0		
Drill Strings												
BHA #5 , PRODUCTION - LATERAL												
Bit Run 5			Drill Bit 8 1/2, DD506TSX, 5333548					Bit Type PDC		Make GE/BAKER HUGHES		
Nozzles (1/32") 12/12/12/14/14/14			Bit Total Fluid Area (nozzles) (in²) 0.78			IADC Bit Dull -----		Hours Drilled By Bit (hr) 27.25		Depth Drilled By Bit (ft) 3,090.00		
BHA Drilling Time (hr)			BHA Depth Drilled (ft)			BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)		

27.25		3,090.00				113.4		16,480.0				19,570.0									
Drill String Components																					
Jts	Item Des				OD (in)	ID (in)	Len (ft)		Cum Len (ft)		Wt (lbf)		Cum Wt (1000lbf)		Make						
81	DRILL PIPE				5	4.28	2,554.75		19,570.00		49,817.6		398		RIG						
21	HWDP - SPIRALED				5	3.00	628.34		17,015.25		31,417.0		349		RIG						
516	DRILL PIPE				5	4.28	16,268.63		16,386.91		317,238.3		317		RIG						
1	SUB - FILTER				6 1/2	3.31	4.21		118.28				0		GE/BAKER HUGHES						
1	MOTOR - STABILIZER SLEEVE				7	3.00	43.18		114.07				0		GE/BAKER HUGHES						
1	SUB - SHOCK				7	3.00	26.48		70.89				0		TOMAX						
1	STABILIZER				6 3/4	2.81	6.10		44.41				0		GE/BAKER HUGHES						
1	MWD TOOL - NON-RETRIEVABLE				7	3.25	28.27		38.31				0		GE/BAKER HUGHES						
1	RSS TOOL				7	4.33	9.34		10.04				0		GE/BAKER HUGHES						
Sensors																					
Sensor Type				Sensor-Bit (ft)						Note											
GAMMA				12.24																	
DIRECTIONAL				22.31																	
Drilling Parameters																					
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)				
06:00	06:15	16,925.0	89.00	356.0	45	110	866.1	614	4,479.0	273.0	182	182	182	182	23.0	23.0					
06:15	06:30	17,014.0	9.00	36.0	41	109	308.7	615	4,190.0	125.0	197	197	197	197	17.0	17.0					
06:30	06:45	17,023.0	85.00	340.0	40	110	292.2	615	4,171.0	231.0	196	196	196	196	19.0	19.0					
06:45	07:45	17,108.0	95.00	95.0	28	110	33.0	615	3,908.0	110.0	208	208	208	208	14.0	14.0					
07:45	08:30	17,203.0	33.00	44.0	24	103	120.2	615	4,000.0	46.0	213	213	213	213	12.0	12.0					
08:30	08:45	17,236.0	0.00	0.0	3	0	0.0	612	3,679.0	0.0	239	239	239	239	8.0	8.0					
08:45	09:15	17,236.0	11.00	22.0	17	80	0.0	615	3,845.0	21.0	218	218	218	218	11.0	11.0					
09:15	10:30	17,247.0	23.00	18.4	13	80	0.0	306	3,836.0	21.0	222	222	222	222	11.0	11.0					
10:30	11:30	17,270.0	27.00	27.0	16	80	120.7	306	3,835.0	26.0	217	217	217	217	12.0	12.0					
11:30	12:45	17,297.0	33.00	26.4	18	80	127.9	306	3,841.0	29.0	220	220	220	220	12.0	12.0					
12:45	13:45	17,330.0	61.00	61.0	21	87	147.2	306	3,860.0	72.0	213	213	213	213	14.0	14.0					
13:45	15:00	17,391.0	94.00	75.2	25	90	194.0	306	3,908.0	86.0	211	211	211	211	14.0	14.0					
15:00	15:45	17,485.0	95.00	126.7	39	96	357.5	306	4,071.0	137.0	198	198	198	198	17.0	17.0					
15:45	16:00	17,580.0	11.00	44.0	38	100	388.1	614	4,104.0	111.0	200	200	200	200	16.0	16.0					
16:00	16:30	17,591.0	83.00	166.0	42	100	415.5	614	4,130.0	152.0	194	194	194	194	20.0	20.0					
16:30	17:30	17,674.0	103.00	103.0	43	100	402.3	614	4,115.0	120.0	193	193	193	193	19.0	19.0					
17:30	18:15	17,777.0	89.00	118.7	41	98	399.8	306	4,108.0	163.0	195	195	195	195	18.0	18.0					
18:15	18:30	17,866.0	16.00	64.0	39	80	485.2	306	4,199.0	153.0	199	199	199	199	17.0	17.0					
18:30	19:00	17,882.0	78.00	156.0	39	80	453.4	306	4,164.0	162.0	196	196	196	196	18.0	18.0					
19:00	19:45	17,960.0	94.00	125.3	37	104	333.5	306	4,045.0	145.0	200	200	200	200	17.0	17.0					
19:45	20:15	18,054.0	94.00	188.0	43	110	505.2	306	4,392.0	224.0	190	190	190	190	21.0	21.0					
20:15	21:00	18,148.0	94.00	125.3	44	104	460.2	306	4,347.0	150.0	189	189	189	189	20.0	20.0					
21:00	21:30	18,242.0	94.00	188.0	37	80	243.5	306	4,125.0	152.0	196	196	196	196	17.0	17.0					
21:30	22:00	18,336.0	95.00	190.0	44	102	539.3	306	4,426.0	217.0	190	190	190	190	21.0	21.0					
22:00	23:00	18,431.0	94.00	94.0	44	110	493.4	461	4,381.0	170.0	189	189	189	189	21.0	21.0					
23:00	23:15	18,525.0	9.00	36.0	42	109	277.7	622	4,226.0	78.0	192	192	192	192	17.0	17.0					
23:15	00:00	18,534.0	85.00	113.3	39	102	275.4	621	4,221.0	127.0	194	194	194	194	18.0	18.0					
00:00	00:30	18,619.0	94.00	188.0	38	80	417.9	621	4,367.0	172.0	194	194	194	194	18.0	18.0					
00:30	01:15	18,713.0	97.00	129.3	39	80	441.6	621	4,391.0	154.0	192	192	192	192	18.0	18.0					
01:15	02:00	18,810.0	94.00	125.3	40	80	445.5	621	4,396.0	147.0	192	192	192	192	17.0	17.0					
02:00	02:45	18,904.0	95.00	126.7	33	80	290.8	621	4,238.0	125.0	199	199	199	199	16.0	16.0					
02:45	03:15	18,999.0	94.00	188.0	43	80	524.9	621	4,532.0	213.0	189	189	189	189	19.0	19.0					
03:15	04:00	19,093.0	96.00	128.0	44	80	518.1	621	4,525.0	191.0	188	188	188	188	19.0	19.0					
04:00	04:30	19,189.0	95.00	190.0	44	80	511.7	621	4,519.0	200.0	188	188	188	188	19.0	19.0					
04:30	05:00	19,284.0	94.00	188.0	44	80	527.8	621	4,535.0	194.0	188	188	188	188	19.0	19.0					
05:00	06:00	19,378.0	192.00	192.0	44	80	527.8	621	4,535.0	194.0	188	188	188	188	19.0	19.0					
Hydraulic Calculations																					
Dens Mud (lb/gal)		ECD End (lb/gal)		Bit Hydraulic Power (hp)		HP/Area (hp/in²)		Jet Vel (ft/s)		Bit dP (psi)		Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)		Vol DrillString (bbl)		Vol Bit to Shoe (bbl)		Vol Shoe to Top (bbl)	
8.45		8.78		179.8		3.2		254.7		496.4		17.4		654.7		340.99		575.34		360.53	
Mud Checks																					
Time			Mud Company					Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)				
12/5/2022 19:00			PIONEER DRILLING FLUIDS					OIL BASE		17,959.0		8.45		58			118.0				
pV (cP)		YP (lbf/100ft²)		Vis 3rpm		Vis 6rpm		Filtrate (mL/30min)			HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)				
		10.000		5		5					6.4			250.0			500.0				
Solids (%)			Low Gravity Solids (%)					Sand (%)			MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)				
9.0			7.7																		
Chlorides (mg/L)			Calcium (mg/L)				CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH			
24,000			4,800.000				0			74.7/25.3			519.0			3.3					
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)									

7.000				10.000				13.000					
Comment													
Mud Checks													
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)	
12/5/2022 08:00		PIONEER DRILLING FLUIDS			OIL BASE	17,221.0		8.40		60		115.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)		HTHP Pressure (psi)		
	8.000	4	4			6.4			250.0		500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)			Pm (mL/mL)		Pf (mL/mL)	
9.0		7.8											
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH
22,000		4,000.000			0		74.7/25.3		548.0		2.9		
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
6.000				9.000				11.000					
Comment													
Last BOP Test													
Date		Test Type	Item Tested				Next Test Date		Com				
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30				12/15/2022 13:00		Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests													
Test Type						Depth (ftKB)			Dens Fluid (lb/gal)				
FORMATION INTEGRITY						1,969.0			13.00				
FORMATION INTEGRITY						7,000.0			9.50				
Casing Pressure Test													
Test Type	Test Subtype		Date		Item Tested				Failed?	Time (min)		P (psi)	
CASING	STANDARD		11/8/2022 11:00		SURFACE, 1,969.0ftKB				No	30.00		1,000.0	
CASING	STANDARD		11/29/2022 20:00		INTERMEDIATE, 7,000.0ftKB				No	30.00		2,500.0	
Kick Offs & Key Depths													
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)					
12/1/2022 09:30			KICK OFF		9,043.0			8,877.1					
12/1/2022 22:45			HEEL		10,236.0			9,527.9					
Casing Strings													
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread	P LeakOff (psi)		
CONDUCTOR		106.0		106.0		20	H40	78.67					
SURFACE		1,969.0		1,968.0		13 3/8	J55	54.50		BTC	1,328.9		
INTERMEDIATE		7,000.0		6,846.6		9 5/8	L80-IC	40.00		BTC	3,378.7		
Gas Emissions - Flare													
Type		Method		Dur (Min)		Amount		Units		Com			
No Data													
Job Supply Amounts													
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note			Cum On Loc		Cum Consumed	
DIESEL		MUD	GAL	7485	4890		Mud Diesel (Ticket #50269)			20,433		38071	
DIESEL		FUEL	GAL	0	3431		Rig fuel			23,371		28181	
Mud Additive Amounts													
Des			Type			Units	Rec	Consumed		On Loc		Cum Cons	
DRILLING FLUID TECH			SUPERVISION			EA	1	1		0.0		15	
DD TONE			ORGANOPHILLIC CLAY			LB SACK		50		168.0		132	
CALCIUM CHLORIDE			CALCIUM CHLORIDE			LB SACK		60		224.0		280	
LIME			ALKALINITY CONTROL			LB SACK		78		222.0		280	
DD LEM			LOW END MODIFIER			GAL		200		625.0		1,025	
DDF MUL			ALL IN ONE EMULSIFIER			GAL		205		800.0		1,125	
TECH SERVICE SUPPORT			SUPERVISION			EA	350	350		0.0		4,550	
DIESEL - FOR MUD			OIL MUD ADDITIVE			GAL	7190	4890		12,948.0		38,071	
Pump Operations													
Pump #	Make			Model		Liner Size (in)		Stroke (in)		Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0	
2	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0	
3	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00		0.081		7,500.0	
Pump Checks													
Pump #	Depth (ftKB)		Time			P (psi)		Strokes (spm)		Q Flow (gpm)		Eff (%)	
2	18,527.0		12/5/2022 23:00			640.0		40		129		95	
2	18,527.0		12/5/2022 23:00			740.0		50		161		95	
2	18,527.0		12/5/2022 23:00			550.0		30		97		95	
3	18,527.0		12/5/2022 23:00			740.0		50		161		95	
3	18,527.0		12/5/2022 23:00			560.0		30		97		95	
3	18,527.0		12/5/2022 23:00			650.0		40		129		95	
Deviation Surveys													
Date				Description				Job					
11/5/2022 22:00				AS DRILL SURVEY				ODR, 11/5/2022 19:00					
Survey Data - All surveys for 24 hr reporting period													
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)	
16,990.00		90.09	162.75	9,574.25		7,525.36		-6,969.75		3,141.66		2.33	
17,085.00		90.09	158.55	9,574.10		7,619.94		-7,059.37		3,173.13		4.42	

17,179.00	89.82	154.15	9,574.17	7,712.62	-7,145.45	3,210.83	4.69
17,211.00	89.48	155.69	9,574.37	7,744.03	-7,174.43	3,224.40	4.93
17,242.00	89.51	158.40	9,574.64	7,774.66	-7,202.97	3,236.48	8.74
17,272.00	89.82	160.79	9,574.81	7,804.48	-7,231.09	3,246.94	8.03
17,305.00	90.25	163.58	9,574.79	7,837.40	-7,262.50	3,257.04	8.55
17,368.00	89.88	166.29	9,574.72	7,900.39	-7,323.33	3,273.41	4.34
17,463.00	90.03	167.95	9,574.80	7,995.36	-7,415.94	3,294.59	1.75
17,558.00	90.25	170.02	9,574.57	8,090.22	-7,509.18	3,312.74	2.19
17,653.00	90.62	171.57	9,573.84	8,184.87	-7,602.95	3,327.93	1.68
17,747.00	90.31	156.42	9,573.08	8,278.54	-7,693.04	3,353.77	16.12
17,842.00	90.46	167.31	9,572.44	8,373.16	-7,783.19	3,383.30	11.46
17,936.00	90.46	170.22	9,571.68	8,467.03	-7,875.37	3,401.61	3.10
18,030.00	90.06	169.55	9,571.26	8,560.80	-7,967.91	3,418.12	0.83
18,124.00	90.49	170.21	9,570.80	8,654.57	-8,060.44	3,434.64	0.84
18,219.00	90.40	170.12	9,570.07	8,749.30	-8,154.05	3,450.86	0.13
18,313.00	90.12	167.50	9,569.64	8,843.17	-8,246.25	3,469.10	2.80
18,408.00	90.22	166.19	9,569.36	8,938.15	-8,338.75	3,490.72	1.38
18,502.00	90.28	166.56	9,568.95	9,032.15	-8,430.11	3,512.87	0.40
18,597.00	89.63	164.62	9,569.02	9,127.14	-8,522.11	3,536.51	2.15
18,692.00	89.82	164.37	9,569.48	9,222.11	-8,613.66	3,561.90	0.33
18,786.00	90.34	164.60	9,569.35	9,316.08	-8,704.23	3,587.05	0.60
18,881.00	90.18	164.70	9,568.92	9,411.06	-8,795.84	3,612.19	0.20
18,976.00	90.22	166.59	9,568.58	9,506.06	-8,887.87	3,635.75	1.99
19,071.00	90.25	166.57	9,568.19	9,601.05	-8,980.27	3,657.79	0.04
19,166.00	90.31	166.42	9,567.73	9,696.04	-9,072.65	3,679.98	0.17
19,260.00	90.15	166.23	9,567.35	9,790.04	-9,163.98	3,702.20	0.26

Formations					
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-813-0762	BILLY.SUMPTER@PXD.COM
HEFNER, KENNETH, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-559-9070	KENNETH.HEFNER@PXD.COM
TRUPE, CODY, MUD ENGINEER	MUD ENGINEER		405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417

Accept:

11/22/2022

Release:

Days Since LTI:

539.00

Days Since RI:

539.00

PERMIAN ASSET TEAM

Job:

ODR

Report Date:

12/07/2022

Report #:

17

DFS:

16

AFE #:

9019715

Total AFE + Sup:

\$3,910,360.88

Daily Field Est. (Cost):

\$99,972.69

Daily Drilling Report

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date	
Jobs											
Responsible Grp 2			Responsible Grp 3			Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type		Subtype				Date		Note			
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad			
Daily Operations											
Footage/Meterage (ft) 2,646.00		Drilling Hours 22.50	% Rotating Time 100.00		End Depth (ftKB) 22,216.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$99,972.69		Cum Field Est To Date \$2,606,612.96	
24 HR ROP (ft/hr) 117.6	Circulating Hours 1.50	% Sliding Time 0.00	End Depth (TVD) (ftKB) 9,566.7		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$11,974.44		Cum Mud Field Est \$158,791.50	Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0			Daily Goal - Next 24 2,500.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PRODUCTION, 25,000.0ftKB					
Avg Connection Gas 112.00		Avg Trip Gas 0.00		Avg Background Gas 78.00		Max Connection Gas 186.00		Max Trip Gas 0.00		Max Drill Gas 209.00	
Operations Summary Drill Prod Lat.T/20,721', trouble shoot pason, Drill Prod Lat. w/Baker RSS T/22,216'. SD: 21,907', Inc: 89.63°, Amz: 164.52°, Avg DLS:.137°, Below:7', Right:13'.											
Operations Next Report Period Drill Lat. w/Baker RSS.											
Operations At Report Time Drilling 8.5" Prod Lat @ 22,216'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 81% Complete Savor Sub 20,227'. Daily NPT:1 H&P: 2.25 3rd Party: 34.75 Pioneer: 0											
Time Log											
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	8.5	14:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/19,570' T/20,721' (1,151' @ 135 fph), WOB:45, GPM:615, SPP:4,000, Diff:500-800, RPM:80-110, TQ:22K, with full returns.		19,570.0	20,721.0		
14:30	1	15:30	PROD, DRL LAT	3RD_PTY	NORMAL	Work with Pason tech support on connection issue with Pason.		20,721.0	20,721.0	1.00	5
15:30	12	03:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/20,721' T/21,932' (1,211' @ 101 fph), WOB:45, GPM:615, SPP:4,000, Diff:500-800, RPM:80-110, TQ:22K, with full returns.		20,721.0	21,932.0		
03:30	0.5	04:00	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.		21,932.0	21,932.0		
04:00	2	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/21,932' T/22,216' (284' @ 142 fph), WOB:45, GPM:615, SPP:4,000, Diff:500-800, RPM:80-110, TQ:22K, with full returns. SD: 21,907', Inc: 89.63°, Amz: 164.52°, Avg DLS:.137°, Below:7', Right:13'.		21,932.0	22,216.0		
Interval Problems											
3RD PARTY, 20,721.0ftKB, 12/6/2022 14:30											

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
5	1.00	No	RECORDING DEVICES	COMMUNICATION		PASON SYSTEMS USA CORP	Trouble shoot Pason tech support on connection issue.

Drill Strings							
BHA #5 , PRODUCTION - LATERAL							
Bit Run		Drill Bit			Bit Type		Make
5		8 1/2, DD506TSX, 5333548			PDC		GE/BAKER HUGHES
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull	Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)
12/12/12/14/14/14		0.78		-----	49.75		5,736.00
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)	Depth Out (ftKB)
49.75		5,736.00		115.3		16,480.0	22,216.0

Drill String Components								
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Make
165	DRILL PIPE		5	4.28	5,200.75	22,216.00	101,414.6	RIG
21	HWDP - SPIRALED		5	3.00	628.34	17,015.25	31,417.0	RIG
516	DRILL PIPE		5	4.28	16,268.63	16,386.91	317,238.3	RIG
1	SUB - FILTER		6 1/2	3.31	4.21	118.28		GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE		7	3.00	43.18	114.07		GE/BAKER HUGHES
1	SUB - SHOCK		7	3.00	26.48	70.89		TOMAX
1	STABILIZER		6 3/4	2.81	6.10	44.41		GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE		7	3.25	28.27	38.31		GE/BAKER HUGHES
1	RSS TOOL		7	4.33	9.34	10.04		GE/BAKER HUGHES

Sensors		
Sensor Type		Note
GAMMA		12.24
DIRECTIONAL		22.31

Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:45	19,570.0	91.00	121.3	44	87	411.8	621	4,493.0	152.0	187	187	187	187	19.0	19.0	
06:45	07:30	19,661.0	94.00	125.3	44	90	478.5	621	4,560.0	188.0	187	187	187	187	20.0	20.0	
07:30	08:00	19,755.0	95.00	190.0	42	90	324.9	621	4,405.0	154.0	189	189	189	189	19.0	19.0	
08:00	10:00	19,850.0	94.00	47.0	43	87	309.0	621	4,387.0	128.0	187	187	187	187	21.0	21.0	
10:00	10:45	19,944.0	94.00	125.3	42	90	346.4	621	4,423.0	159.0	188	188	188	188	20.0	20.0	
10:45	11:30	20,038.0	95.00	126.7	44	99	315.5	621	4,393.0	133.0	186	186	186	186	21.0	21.0	
11:30	12:00	20,133.0	94.00	188.0	45	100	541.3	621	4,623.0	243.0	186	186	186	186	22.0	22.0	
12:00	12:30	20,227.0	94.00	188.0	45	100	512.1	621	4,594.0	213.0	185	185	185	185	22.0	22.0	
12:30	13:00	20,321.0	95.00	190.0	46	100	556.2	621	4,638.0	229.0	185	185	185	185	21.0	21.0	
13:00	13:30	20,416.0	94.00	188.0	46	100	578.2	620	4,660.0	242.0	185	185	185	185	21.0	21.0	
13:30	14:00	20,510.0	98.00	196.0	43	100	398.7	621	4,477.0	200.0	188	188	188	188	20.0	20.0	
14:00	14:30	20,608.0	113.00	226.0	45	100	596.2	620	4,678.0	228.0	186	186	186	186	21.0	21.0	
14:30	15:30	20,721.0	0.00		38	98	9.5	621	4,086.0	99.0	196	196	196	196	18.0	18.0	
15:30	15:45	20,721.0	75.00	300.0	47	100	599.1	620	4,681.0	237.0	183	183	183	183	23.0	23.0	
15:45	16:00	20,796.0	16.00	64.0	44	99	472.4	620	4,555.0	145.0	189	189	189	189	19.0	19.0	
16:00	16:30	20,812.0	79.00	158.0	47	100	633.3	620	4,714.0	237.0	183	183	183	183	22.0	22.0	
16:30	17:15	20,891.0	98.00	130.7	43	100	418.7	621	4,498.0	205.0	189	189	189	189	21.0	21.0	
17:15	17:45	20,989.0	90.00	180.0	46	100	493.2	621	4,709.0	224.0	184	184	184	184	22.0	22.0	
17:45	18:45	21,079.0	95.00	95.0	46	100	282.8	621	4,499.0	105.0	185	185	185	185	21.0	21.0	
18:45	19:15	21,174.0	95.00	190.0	44	110	452.5	621	4,671.0	182.0	187	187	187	187	25.0	25.0	
19:15	19:30	21,269.0	5.00	20.0	27	109	52.5	621	4,264.0	54.0	206	206	206	206	17.0	17.0	
19:30	20:45	21,274.0	36.00	28.8	22	110	0.0	621	4,125.0	32.0	210	210	210	210	15.0	15.0	
20:45	22:45	21,310.0	53.00	26.5	19	110	7.9	621	4,223.0	27.0	210	210	210	210	15.0	15.0	
22:45	23:00	21,363.0	8.00	32.0	31	109	119.7	621	4,338.0	75.0	203	203	203	203	18.0	18.0	
23:00	00:00	21,371.0	86.00	86.0	39	71	301.0	621	4,518.0	132.0	191	191	191	191	21.0	21.0	
00:00	00:30	21,457.0	96.00	192.0	42	80	446.1	621	4,576.0	171.0	188	188	188	188	22.0	22.0	
00:30	01:15	21,553.0	94.00	125.3	43	80	483.6	620	4,613.0	173.0	187	187	187	187	21.0	21.0	
01:15	02:00	21,647.0	95.00	126.7	43	80	502.8	620	4,632.0	168.0	187	187	187	187	21.0	21.0	
02:00	02:45	21,742.0	94.00	125.3	44	80	488.1	620	4,617.0	161.0	186	186	186	186	21.0	21.0	
02:45	03:30	21,836.0	96.00	128.0	44	80	499.3	621	4,629.0	137.0	186	186	186	186	21.0	21.0	
03:30	04:00	21,932.0	0.00		39	80	237.0	621	4,479.0	151.0	192	192	192	192	19.0	19.0	
04:00	06:00	21,932.0	284.00	142.0	39	80	237.0	621	4,479.0	151.0	192	192	192	192	19.0	19.0	

Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)	
8.45	8.80	179.8	3.2	254.7	496.4	17.4	654.7	387.99	696.79	360.53	

Mud Checks												
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)
12/6/2022 18:00		PIONEER DRILLING FLUIDS			OIL BASE	21,106.0		8.45		61		120.0
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)		HTHP Pressure (psi)	

	11.000	6	7		8.0	250.0	500.0							
Solids (%)	8.5	Low Gravity Solids (%)			7.0	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)					
Chlorides (mg/L)	28,000	Calcium (mg/L)		6,000.000	CaCl (ppm)	0	Oil Water Ratio	75.4/24.6	Electric Stab (V)	536.0	Lime (lb/bbl)	3.6	pH	
Gel 10 sec (lb/100ft²)				10.000	Gel 10 min (lb/100ft²)				14.000	Gel 30 min (lb/100ft²)				17.000
Comment														
Mud Checks														
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)				
12/6/2022 08:30		PIONEER DRILLING FLUIDS			OIL BASE	19,847.0	8.45	62		117.0				
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		8.0	HTHP Temperature (° F)		HTHP Pressure (psi)			
	10.000	6	7						250.0		500.0			
Solids (%)	9.5	Low Gravity Solids (%)			8.2	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)					
Chlorides (mg/L)	25,000	Calcium (mg/L)		5,200.000	CaCl (ppm)	0	Oil Water Ratio	74.6/25.4	Electric Stab (V)	592.0	Lime (lb/bbl)	3.3	pH	
Gel 10 sec (lb/100ft²)				9.000	Gel 10 min (lb/100ft²)				13.000	Gel 30 min (lb/100ft²)				17.000
Comment														
Last BOP Test														
Date		Test Type		Item Tested			Next Test Date		Com					
11/24/2022 13:00		BOP		BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW					
Leak Off and Formation Integrity Tests														
Test Type						Depth (ftKB)			Dens Fluid (lb/gal)					
FORMATION INTEGRITY						1,969.0			13.00					
FORMATION INTEGRITY						7,000.0			9.50					
Casing Pressure Test														
Test Type	Test Subtype		Date			Item Tested			Failed?	Time (min)		P (psi)		
CASING	STANDARD		11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00		1,000.0		
CASING	STANDARD		11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00		2,500.0		
Kick Offs & Key Depths														
Date			Type			Top Depth (ftKB)			Depth Top (TVD) (ftKB)					
12/1/2022 09:30			KICK OFF			9,043.0			8,877.1					
12/1/2022 22:45			HEEL			10,236.0			9,527.9					
Casing Strings														
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)		
CONDUCTOR		106.0		106.0		20	H40	78.67						
SURFACE		1,969.0		1,968.0		13 3/8	J55	54.50		BTC		1,328.9		
INTERMEDIATE		7,000.0		6,846.6		9 5/8	L80-IC	40.00		BTC		3,378.7		
Gas Emissions - Flare														
Type		Method			Dur (Min)			Amount		Units		Com		
No Data														
Job Supply Amounts														
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc		Cum Consumed			
DIESEL		MUD	GAL	0	7663		Mud Diesel		12,770		45734			
DIESEL		FUEL	GAL	0	3523		Rig fuel		19,848		31704			
Mud Additive Amounts														
Des			Type			Units	Rec	Consumed	On Loc		Cum Cons			
TRUCKING			MISCELLANEOUS			EA	1	1	0.0		15			
DRILLING FLUID TECH			SUPERVISION			EA	1	1	0.0		16			
PMDHYPDF-A200			SHAKER SCREEN			EA		2	41.0		15			
XMP GILSONITE			FILTRATE CONTROL			LB SACK		8	54.0		8			
DD TONE			ORGANOPHILLIC CLAY			LB SACK		50	118.0		182			
CALCIUM CHLORIDE			CALCIUM CHLORIDE			LB SACK		65	159.0		345			
LIME			ALKALINITY CONTROL			LB SACK		72	150.0		352			
DDF MUL			ALL IN ONE EMULSIFIER			GAL		120	680.0		1,245			
DD LEM			LOW END MODIFIER			GAL		200	425.0		1,225			
TECH SERVICE SUPPORT			SUPERVISION			EA	350	350	0.0		4,900			
DIESEL - FOR MUD			OIL MUD ADDITIVE			GAL	7485	7663	12,770.0		45,734			
Pump Operations														
Pump #	Make			Model		Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)			
1	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00	0.081		7,500.0			
2	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00	0.081		7,500.0			
3	GARDNER-DENVER			PZ-11-1600		5 1/2		11.00	0.081		7,500.0			
Pump Checks														
Pump #	Depth (ftKB)		Time			P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)			
2	21,932.0		12/7/2022 03:30			700.0	40		129		95			
2	21,932.0		12/7/2022 03:30			810.0	50		161		95			
2	21,932.0		12/7/2022 03:30			610.0	30		97		95			
3	21,932.0		12/7/2022 03:30			610.0	30		97		95			

3	21,932.0	12/7/2022 03:30	700.0	40	129	95	
3	21,932.0	12/7/2022 03:30	800.0	50	161	95	
Deviation Surveys							
Date		Description	Job				
11/5/2022 22:00		AS DRILL SURVEY	ODR, 11/5/2022 19:00				
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
19,640.00	90.43	166.53	9,566.06	10,170.02	-9,533.21	3,792.04	0.68
19,734.00	90.40	166.45	9,565.38	10,264.02	-9,624.60	3,814.00	0.09
19,829.00	90.43	164.92	9,564.69	10,359.01	-9,716.65	3,837.49	1.61
19,923.00	90.59	164.59	9,563.85	10,452.99	-9,807.34	3,862.20	0.39
20,018.00	90.28	166.48	9,563.13	10,547.98	-9,899.32	3,885.93	2.02
20,113.00	90.62	166.17	9,562.39	10,642.97	-9,991.62	3,908.39	0.48
20,207.00	90.00	166.41	9,561.88	10,736.97	-10,082.94	3,930.67	0.71
20,302.00	89.54	165.98	9,562.26	10,831.97	-10,175.20	3,953.33	0.66
20,396.00	89.17	166.12	9,563.32	10,925.96	-10,266.42	3,975.99	0.42
20,490.00	89.48	166.39	9,564.43	11,019.95	-10,357.72	3,998.33	0.44
20,584.00	90.31	165.22	9,564.60	11,113.95	-10,448.85	4,021.38	1.53
20,679.00	90.03	164.48	9,564.32	11,208.93	-10,540.54	4,046.21	0.83
20,773.00	90.59	165.26	9,563.81	11,302.91	-10,631.28	4,070.74	1.02
20,868.00	90.09	164.61	9,563.24	11,397.90	-10,723.01	4,095.43	0.86
20,962.00	89.88	165.90	9,563.27	11,491.89	-10,813.92	4,119.36	1.39
21,057.00	89.97	166.29	9,563.39	11,586.89	-10,906.13	4,142.18	0.42
21,151.00	89.72	166.26	9,563.65	11,680.89	-10,997.45	4,164.49	0.27
21,245.00	89.82	171.19	9,564.02	11,774.74	-11,089.61	4,182.86	5.25
21,341.00	89.97	167.42	9,564.20	11,870.55	-11,183.92	4,200.67	3.93
21,435.00	89.75	164.66	9,564.43	11,964.54	-11,275.13	4,223.35	2.95
21,529.00	90.00	165.02	9,564.63	12,058.53	-11,365.86	4,247.93	0.47
21,624.00	89.85	164.86	9,564.76	12,153.51	-11,457.60	4,272.61	0.23
21,718.00	89.88	164.71	9,564.98	12,247.50	-11,548.30	4,297.28	0.16
21,813.00	90.43	164.85	9,564.72	12,342.48	-11,639.97	4,322.22	0.60
21,907.00	89.63	164.52	9,564.67	12,436.46	-11,730.63	4,347.05	0.92
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
269_0_DEAN	-6,639.0			9,628.0			
304_0_STRAWN	-8,065.0			11,054.0			
Daily Contacts							
Job Contact		Title		Office	Mobile	Email	
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM	
SPACEK, KYLE, ENGINEER		ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM	
LUTHER, JACKIE, ENGINEER		ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM	
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM	
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM	
SUMPTER, BILLY, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM	
HEFNER, KENNETH, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-559-9070	KENNETH.HEFNER@PXD.COM	
TRUPE, CODY, MUD ENGINEER		MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM	
RIG-H&P 417, RIG PHONE		RIG PHONE		361-489-3691		DL-HP417@PXD.COM	
Personnel Log							
Company						Count	
PIONEER NATURAL RESOURCES USA INC						2	
PIONEER NATURAL RESOURCES USA INC						1	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO						13	
BAKER HUGHES OILFIELD OPERATIONS INC						2	
MID CONTINENT WELL LOGGING SERVICE INC						2	
STALLION SOLIDS CONTROL INC						1	

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	540.00
Days Since RI:	540.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/08/2022
Report #:	18
DFS:	17
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$96,872.74

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date	
Jobs											
Responsible Grp 2			Responsible Grp 3			Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2			ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type		Subtype				Date		Note			
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad			
Daily Operations											
Footage/Meterage (ft) 2,548.00		Drilling Hours 23.25	% Rotating Time 97.85		End Depth (ftKB) 24,764.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$96,872.74		Cum Field Est To Date \$2,705,012.36	
24 HR ROP (ft/hr) 109.6	Circulating Hours 0.50	% Sliding Time 2.15	End Depth (TVD) (ftKB) 9,551.9		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$9,384.80		Cum Mud Field Est \$168,176.30	Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,500.0			Daily Goal - Next 24 255.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PRODUCTION, 25,008.0ftKB					
Avg Connection Gas 43.00		Avg Trip Gas 0.00	Avg Background Gas 45.00		Max Connection Gas 53.00		Max Trip Gas 0.00		Max Drill Gas 64.00		
Operations Summary Drill Prod Lat. w/Baker RSS T/24,764'. SD: 24,645', Inc: 90.0°, Amz: 164.9°, Avg DLS: 0 14°, Below:4.53', Right:7.72'.											
Operations Next Report Period Drill Lat. w/Baker RSS T/25,019' +/- K&M clean up cycle, TOO.H. to run 5-1/2" production casing.											
Operations At Report Time Drilling 8.5" Prod Lat @ 24,764'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 98.5% Complete Savor Sub 22,775'. Daily NPT:1 H&P: 2.25 3rd Party: 34.75 Pioneer: 0											
Time Log											
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	9.75	15:45	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/22,216' T/23,376' @ 119.0 fph), WOB:47, GPM:620 SPP:4,200, Diff:450-500 RPM:80-100, TQ:26K, with full returns.		22,216.0	23,376.0		
15:45	0.5	16:15	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.		23,376.0	23,376.0		
16:15	13.75	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/23,376 T/24,764 @ 101.0 fph), WOB:47, GPM:620 SPP:4,400, Diff:450-700, RPM:80-100, TQ:26K, with full returns. SD: 24,645', Inc: 90.0°, Amz: 164.9°, Avg DLS: 0 14°, Below:4.53', Right:7.72'		23,376.0	24,764.0		
Drill Strings											
BHA #5 , PRODUCTION - LATERAL											
Bit Run			Drill Bit 5 8 1/2, DD506TSX, 5333548				Bit Type PDC		Make GE/BAKER HUGHES		
Nozzles (1/32") 12/12/12/14/14/14			Bit Total Fluid Area (nozzles) (in²) 0.78		IADC Bit Dull -----		Hours Drilled By Bit (hr) 73.00		Depth Drilled By Bit (ft) 8,284.00		
BHA Drilling Time (hr) 73.00			BHA Depth Drilled (ft) 8,284.00		BHA ROP (ft/hr) 113.5		Depth In (ftKB) 16,480.0		Depth Out (ftKB) 24,764.0		

Drill String Components								
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
165	DRILL PIPE	5	4.28	7,748.75	24,764.00	151,100.6	500	RIG
21	HWDP - SPIRALED	5	3.00	628.34	17,015.25	31,417.0	349	RIG
516	DRILL PIPE	5	4.28	16,268.63	16,386.91	317,238.3	317	RIG
1	SUB - FILTER	6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	43.18	114.07		0	GE/BAKER HUGHES
1	SUB - SHOCK	7	3.00	26.48	70.89		0	TOMAX
1	STABILIZER	6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.27	38.31		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.34	10.04		0	GE/BAKER HUGHES

Sensors		
Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.24	
DIRECTIONAL	22.31	

Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:15	22,216.0	59.00	236.0	46	98	451.3	621	4,696.0	179.0	184	184	184	184	21.0	21.0	
06:15	07:00	22,275.0	33.00	44.0	40	90	388.7	621	4,630.0	174.0	180	180	180	180	23.0	23.0	
07:00	08:00	22,308.0	94.00	94.0	46	80	249.1	621	4,529.0	103.0	187	187	187	187	20.0	20.0	
08:00	08:45	22,402.0	95.00	126.7	44	86	255.9	621	4,535.0	145.0	189	189	189	189	20.0	20.0	
08:45	09:30	22,497.0	94.00	125.3	47	86	385.9	621	4,667.0	149.0	187	187	187	187	21.0	21.0	
09:30	10:15	22,591.0	94.00	125.3	47	86	368.8	621	4,650.0	129.0	186	186	186	186	21.0	21.0	
10:15	11:15	22,685.0	94.00	94.0	43	87	177.1	621	4,456.0	123.0	190	190	190	190	19.0	19.0	
11:15	11:45	22,779.0	94.00	188.0	46	87	416.5	620	4,742.0	155.0	185	185	185	185	21.0	21.0	
11:45	12:30	22,873.0	96.00	128.0	46	85	470.0	620	4,796.0	199.0	184	184	184	184	22.0	22.0	
12:30	13:15	22,969.0	93.00	124.0	43	86	401.2	620	4,726.0	148.0	188	188	188	188	21.0	21.0	
13:15	13:45	23,062.0	34.00	68.0	40	84	0.0	621	4,196.0	101.0	193	193	193	193	20.0	20.0	
13:45	14:00	23,096.0	60.00	240.0	45	86	435.4	620	4,760.0	151.0	185	185	185	185	22.0	22.0	
14:00	15:00	23,156.0	93.00	93.0	37	87	79.1	621	4,399.0	144.0	194	194	194	194	20.0	20.0	
15:00	15:45	23,249.0	127.00	127.0	44	87	460.2	620	4,787.0	192.0	187	187	187	187	22.0	22.0	
15:45	16:15	23,376.0	0.00		5	0	0.0	470	2,940.0	0.0	231	231	231	231	9.0	9.0	
16:15	16:45	23,376.0	24.00	48.0	43	78	420.8	614	4,747.0	143.0	190	190	190	190	22.0	22.0	
16:45	17:15	23,400.0	44.00	88.0	46	88	470.6	617	4,798.0	142.0	184	184	184	184	23.0	23.0	
17:15	18:15	23,444.0	94.00	94.0	44	96	319.7	618	4,647.0	112.0	187	187	187	187	22.0	22.0	
18:15	19:15	23,538.0	94.00	94.0	45	99	467.9	618	4,796.0	157.0	186	186	186	186	23.0	23.0	
19:15	19:45	23,632.0	60.00	120.0	40	98	405.1	621	4,814.0	193.0	191	191	191	191	21.0	21.0	
19:45	20:00	23,692.0	0.00		9	0	0.0	621	3,718.0	0.0	221	221	221	221	13.0	13.0	
20:00	20:30	23,692.0	34.00	68.0	27	95	0.0	621	4,343.0	124.0	201	201	201	201	19.0	19.0	
20:30	21:00	23,726.0	94.00	188.0	38	104	353.6	620	4,763.0	176.0	193	193	193	193	23.0	23.0	
21:00	22:00	23,820.0	94.00	125.3	41	94	265.1	621	4,675.0	119.0	189	189	189	189	22.0	22.0	
22:00	23:00	23,914.0	94.00	94.0	44	91	268.2	620	4,675.0	96.0	187	187	187	187	22.0	22.0	
23:00	23:30	24,008.0	7.00	14.0	0	0	0.0	323	1,509.0	0.0	252	252	252	252	1.0	1.0	
23:30	00:00	24,015.0	32.00	64.0	31	100	136.5	541	3,721.0	73.0	202	202	202	202	19.0	19.0	
00:00	00:30	24,047.0	56.00	112.0	40	93	238.8	621	4,652.0	138.0	189	189	189	189	22.0	22.0	
00:30	01:15	24,103.0	94.00	125.3	45	96	458.0	620	4,875.0	175.0	186	186	186	186	23.0	23.0	
01:15	01:30	24,197.0	17.00	68.0	44	100	362.7	621	4,779.0	87.0	189	189	189	189	20.0	20.0	
01:30	02:00	24,214.0	77.00	154.0	44	99	473.2	620	4,889.0	165.0	186	186	186	186	22.0	22.0	
02:00	06:00	24,291.0	473.00	118.3	44	99	473.2	620	4,889.0	165.0	186	186	186	186	22.0	22.0	

Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)	
8.50	8.95	180.0	3.2	254.3	497.8	17.4	653.6	433.24	813.74	360.53	

Mud Checks												
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)
12/7/2022 18:00		PIONEER DRILLING FLUIDS			OIL BASE	23,511.0		8.50		60		120.0
pV (cP)	YP (lbF/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	10.000	6	7			10.0		250.0		500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
8.0					6.5							
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
27,000		5,200.000			0		75.5/24.5		544.0		3.8	
Gel 10 sec (lbF/100ft²)				Gel 10 min (lbF/100ft²)				Gel 30 min (lbF/100ft²)				
9.000				14.000				19.000				

Mud Checks											
Time		Mud Company			Type		Depth (ftKB)		Density (lb/gal)		T Flowline (° F)
12/7/2022 09:00		PIONEER DRILLING FLUIDS			OIL BASE		22,521.0		8.50		117.0
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	

	10.000	7	7		10.0	250.0	500.0
Solids (%)	8.5	Low Gravity Solids (%)	7.0	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
Chlorides (mg/L)	27,500	Calcium (mg/L)	5,600.000	CaCl (ppm)	0	Oil Water Ratio	75.4/24.6
						Electric Stab (V)	641.0
						Lime (lb/bbl)	3.5
						pH	
Gel 10 sec (lb/100ft²)	8.000	Gel 10 min (lb/100ft²)	14.000	Gel 30 min (lb/100ft²)	18.000		
Comment							
Last BOP Test							
Date	Test Type	Item Tested			Next Test Date	Com	
11/24/2022 13:00	BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00	Test BOP 5000 High /250 LOW	
Leak Off and Formation Integrity Tests							
Test Type				Depth (ftKB)		Dens Fluid (lb/gal)	
FORMATION INTEGRITY				1,969.0		13.00	
FORMATION INTEGRITY				7,000.0		9.50	
Casing Pressure Test							
Test Type	Test Subtype	Date	Item Tested			Failed?	Time (min)
CASING	STANDARD	11/8/2022 11:00	SURFACE, 1,969.0ftKB			No	30.00
CASING	STANDARD	11/29/2022 20:00	INTERMEDIATE, 7,000.0ftKB			No	30.00
Kick Offs & Key Depths							
Date		Type	Top Depth (ftKB)			Depth Top (TVD) (ftKB)	
12/1/2022 09:30		KICK OFF	9,043.0			8,877.1	
12/1/2022 22:45		HEEL	10,236.0			9,527.9	
Casing Strings							
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	106.0	106.0	20	H40	78.67		
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	3,378.7
Gas Emissions - Flare							
Type	Method	Dur (Min)		Amount	Units	Com	
No Data							
Job Supply Amounts							
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc
DIESEL	MUD	GAL	15072	6532		Mud Diesel (#50486, 50461)	21,310
DIESEL	FUEL	GAL	0	2783		Rig fuel	17,065
Mud Additive Amounts							
Des	Type			Units	Rec	Consumed	On Loc
TRUCKING	MISCELLANEOUS			EA	1	1	0.0
BACKHAUL	MISCELLANEOUS			PER LOAD	1	1	0.0
DRILLING FLUID TECH	SUPERVISION			EA	1	1	0.0
PMDHYPDF-A200	SHAKER SCREEN			EA		1	40.0
DD TONE	ORGANOPHILLIC CLAY			LB SACK	100	40	178.0
CALCIUM CHLORIDE	CALCIUM CHLORIDE			LB SACK	168	40	287.0
DDF MUL	ALL IN ONE EMULSIFIER			GAL	275	90	865.0
LIME	ALKALINITY CONTROL			LB SACK	200	95	255.0
DD LEM	LOW END MODIFIER			GAL	550	100	875.0
TECH SERVICE SUPPORT	SUPERVISION			EA	350	350	0.0
DIESEL - FOR MUD	OIL MUD ADDITIVE			GAL	7585	8434	11,921.0
Pump Operations							
Pump #	Make		Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081	7,500.0
2	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081	7,500.0
3	GARDNER-DENVER		PZ-11-1600	5 1/2	11.00	0.081	7,500.0
Pump Checks							
Pump #	Depth (ftKB)	Time		P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
3	24,634.0	12/8/2022 04:00		660.0	30	97	95
3	24,634.0	12/8/2022 04:56		740.0	40	129	95
3	24,634.0	12/8/2022 04:56		830.0	50	161	95
2	24,634.0	12/8/2022 04:58		670.0	30	97	95
2	24,634.0	12/8/2022 04:58		750.0	40	129	95
2	24,634.0	12/8/2022 04:58		875.0	50	161	95
Deviation Surveys							
Date		Description			Job		
11/5/2022 22:00		AS DRILL SURVEY			ODR, 11/5/2022 19:00		
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
22,286.00	90.31	166.53	9,561.62	12,815.32	-12,098.37	4,438.20	2.43
22,380.00	90.31	166.38	9,561.11	12,909.32	-12,189.76	4,460.21	0.16
22,475.00	90.18	166.65	9,560.71	13,004.31	-12,282.14	4,482.37	0.32
22,569.00	90.28	166.59	9,560.33	13,098.30	-12,373.59	4,504.12	0.12
22,664.00	90.18	166.53	9,559.95	13,193.30	-12,465.98	4,526.20	0.12

22,758.00	90.43	164.88	9,559.45	13,287.29	-12,557.07	4,549.41	1.78
22,853.00	90.43	164.91	9,558.73	13,382.27	-12,648.78	4,574.16	0.03
22,948.00	90.62	164.88	9,557.86	13,477.25	-12,740.50	4,598.92	0.20
23,042.00	90.59	164.61	9,556.87	13,571.23	-12,831.18	4,623.65	0.29
23,136.00	90.40	164.73	9,556.06	13,665.21	-12,921.83	4,648.50	0.24
23,231.00	90.15	164.79	9,555.60	13,760.19	-13,013.49	4,673.47	0.27
23,325.00	90.37	164.74	9,555.18	13,854.17	-13,104.19	4,698.17	0.24
23,419.00	90.09	164.61	9,554.80	13,948.15	-13,194.84	4,723.02	0.33
23,513.00	90.09	166.66	9,554.65	14,042.14	-13,285.90	4,746.34	2.18
23,607.00	90.22	167.00	9,554.40	14,136.13	-13,377.43	4,767.75	0.39
23,702.00	90.92	169.47	9,553.45	14,231.03	-13,470.42	4,787.12	2.70
23,796.00	90.43	169.11	9,552.34	14,324.86	-13,562.77	4,804.59	0.65
23,890.00	90.18	168.36	9,551.84	14,418.74	-13,654.96	4,822.95	0.84
23,984.00	89.78	164.92	9,551.88	14,512.72	-13,746.40	4,844.67	3.68
24,079.00	90.59	162.59	9,551.57	14,607.65	-13,837.60	4,871.24	2.60
24,173.00	90.46	165.61	9,550.71	14,701.59	-13,927.99	4,896.99	3.22
24,267.00	89.26	164.10	9,550.94	14,795.57	-14,018.72	4,921.55	2.05
24,362.00	90.06	165.07	9,551.50	14,890.54	-14,110.30	4,946.80	1.32
24,456.00	89.72	164.40	9,551.68	14,984.52	-14,200.98	4,971.55	0.80
24,550.00	90.00	164.77	9,551.91	15,078.49	-14,291.60	4,996.53	0.49
24,645.00	90.00	164.90	9,551.91	15,173.48	-14,383.29	5,021.38	0.14

Formations					
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP	-6,563.0		9,552.0		
PBHL/TD	-6,563.0		9,552.0		
269_0_DEAN	-6,639.0		9,628.0		
304_0_STRAWN	-8,065.0		11,054.0		

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-813-0762	BILLY.SUMPTER@PXD.COM
ASH, WARREN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		661-333-4101	WARREN.ASH@PXD.COM
TRUPE, CODY, MUD ENGINEER	MUD ENGINEER		405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	2
PIONEER NATURAL RESOURCES USA INC	1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
MID CONTINENT WELL LOGGING SERVICE INC	2
STALLION SOLIDS CONTROL INC	1

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	541.00
Days Since RI:	541.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/09/2022
Report #:	19
DFS:	18
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$78,228.68

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date
Jobs										
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype				Date		Note		
MILESTONE		ESTIMATED PAD RELEASE				2/9/2023		1st well on 6 well pad		
Daily Operations										
Footage/Meterage (ft) 255.00		Drilling Hours 2.50	% Rotating Time 100.00	End Depth (ftKB) 25,019.0	Target Depth (ftKB) 25,106.0		Daily Field Est Total \$78,228.68		Cum Field Est To Date \$2,782,866.71	
24 HR ROP (ft/hr) 102.0	Circulating Hours 14.00	% Sliding Time 0.00	End Depth (TVD) (ftKB) 9,547.3	Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$9,819.76		Cum Mud Field Est \$177,996.06	Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 255.0			Daily Goal - Next 24 0.0			Goal Comments Goal Met	
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PRODUCTION, 25,008.0ftKB				
Avg Connection Gas 43.00		Avg Trip Gas 40.00	Avg Background Gas 31.00		Max Connection Gas 68.00		Max Trip Gas 90.00		Max Drill Gas 60.00	
Operations Summary Drill Lat. w/Baker RSS T/25,019' K&M clean up cycle, Back ream out to 22,896', Circ to run 5-1/2" production casing.										
Operations Next Report Period Finish circulate hople clean,TOOH F/22,896', L/D Dir tools, Remove WB, Rig up and Run 5 1/2" prod casing.										
Operations At Report Time Circulate hole clean at 22,896'										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 100% Complete Savor Sub 23,030'. Daily NPT: 7 H&P: 2.25 3rd Party: 34.75 Pioneer: 7										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	2.5	08:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5"Prod Lat. w/Baker RSS F/24,764' T/25,019'(255' @ 102 fph), WOB:47, GPM:620 SPP:4,400, Diff:450-700, RPM:80-100, TQ:26K, with full returns. SD: 24,994', Inc: 90.59°, Amz: 165.52°, Avg DLS: 1.12°, Below:0', Right:1.6'	24,764.0	25,019.0		
08:30	9	17:30	PROD, DRL LAT	K&M_CLEANUP	NORMAL	Circ K&M clean up cycle of 8 Btms up / 7 Btms up Recomendated by K&M. GPM 630 RPM 60 UP/ RPM 110 DN. **Downlink tool out of center mode prior to TOH***	25,019.0	25,019.0		
17:30	7	00:30	PROD, DRL LAT	TOOH_NONELEV	NORMAL	Back ream out to 22,899' due to over pull. 450 GPM 60 RPM	25,019.0	25,019.0	7.00	6
00:30	5.5	06:00	PROD, DRL LAT	CIRC	NORMAL	Circ hole clean at 22,899'. 620 GPM 100 RPM	25,019.0	25,019.0		
Interval Problems										
DOWNHOLE CONDITIONS, 25,019.0ftKB, 12/8/2022 17:30										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment	
				WELLBORE	FORMATION		PIONEER NATURAL RESOURCES USA		Back ream out to 22,899' due to over	

6	7.00	No		INSTABILITY		INC		pull,									
Drill Strings																	
BHA #5 , PRODUCTION - LATERAL																	
Bit Run		Drill Bit				Bit Type		Make									
5 8 1/2, DD506TSX, 5333548						PDC		GE/BAKER HUGHES									
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)									
12/12/12/14/14/14		0.78		-----		75.50		8,539.00									
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)									
75.50		8,539.00		113.1		16,480.0		25,019.0									
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
254	DRILL PIPE			5	4.28	8,003.75	25,019.00	156,073.1	505	RIG							
21	HWDP - SPIRALED			5	3.00	628.34	17,015.25	31,417.0	349	RIG							
516	DRILL PIPE			5	4.28	16,268.63	16,386.91	317,238.3	317	RIG							
1	SUB - FILTER			6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES							
1	MOTOR - STABILIZER SLEEVE			7	3.00	43.18	114.07		0	GE/BAKER HUGHES							
1	SUB - SHOCK			7	3.00	26.48	70.89		0	TOMAX							
1	STABILIZER			6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES							
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	28.27	38.31		0	GE/BAKER HUGHES							
1	RSS TOOL			7	4.33	9.34	10.04		0	GE/BAKER HUGHES							
Sensors																	
Sensor Type			Sensor-Bit (ft)				Note										
GAMMA			12.24														
DIRECTIONAL			22.31														
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:30	24,764.0	92.00	184.0	42	109	381.7	620	4,911.0	145.0	188	188	188	188	23.0	23.0	
06:30	07:15	24,856.0	29.00	38.7	41	96	293.2	620	4,821.0	119.0	193	193	193	193	21.0	21.0	
07:15	08:00	24,885.0	65.00	86.7	42	104	206.5	621	4,735.0	109.0	189	189	189	189	22.0	22.0	
08:00	08:30	24,950.0	69.00	138.0	41	104	204.6	621	4,732.0	116.0	192	192	192	192	22.0	22.0	
08:30	08:45	25,019.0	0.00		24	108	0.0	621	4,644.0	0.0	206	206	206	206	16.0	16.0	
08:45	09:00	25,019.0	0.00		1	58	0.0	621	4,572.0	0.0	233	233	233	233	15.0	15.0	
09:00	17:30	25,019.0	0.00		18	100	0.0	621	4,573.0	0.0	215	215	215	215	14.0	14.0	
Hydraulic Calculations																	
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)						
8.50	8.90	180.9		3.2	254.7	499.4	17.4	654.7	437.77	825.44	360.53						
Mud Checks																	
Time		Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)						
12/8/2022 18:00		PIONEER DRILLING FLUIDS				OIL BASE	25,019.0	8.50	61		119.0						
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)							
	10.000	6	6			10.4		250.0		500.0							
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)					
8.5		7.1															
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH					
26,000		5,200.000		0		76/24		521.0		2.9							
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)									
7.000				12.000				15.000									
Comment																	
Mud Checks																	
Time		Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)						
12/8/2022 11:00		PIONEER DRILLING FLUIDS				OIL BASE	25,019.0	8.50	60		119.0						
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)							
	9.000	6	6			10.4		250.0		500.0							
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)					
8.5		7.1															
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH					
27,000		5,600.000		0		76.5/23.5		607.0		3.9							
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)									
8.000				13.000				17.000									
Comment																	
Last BOP Test																	
Date		Test Type	Item Tested				Next Test Date		Com								
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30				12/15/2022 13:00		Test BOP 5000 High /250 LOW								
Leak Off and Formation Integrity Tests																	
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)									
FORMATION INTEGRITY						1,969.0		13.00									
FORMATION INTEGRITY						7,000.0		9.50									
Casing Pressure Test																	
Test Type	Test Subtype		Date			Item Tested			Failed?	Time (min)		P (psi)					
CASING	STANDARD		11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00		1,000.0					

CASING	STANDARD	11/29/2022 20:00		INTERMEDIATE, 7,000.0ftKB		No	30.00	2,500.0	
Kick Offs & Key Depths									
Date		Type		Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
12/1/2022 09:30		KICK OFF		9,043.0		8,877.1			
12/1/2022 22:45		HEEL		10,236.0		9,527.9			
Casing Strings									
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0	106.0		20	H40	78.67			
SURFACE	1,969.0	1,968.0		13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0	6,846.6		9 5/8	L80-IC	40.00	BTC	3,378.7	
Gas Emissions - Flare									
Type		Method		Dur (Min)		Amount	Units	Com	
No Data									
Job Supply Amounts									
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed	
DIESEL	FUEL	GAL	7490	3131		Rig fuel	21,424	37618	
DIESEL	MUD	GAL		7125		Mud Diesel	14,185	59391	
Mud Additive Amounts									
Des		Type			Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH		SUPERVISION			EA	1	1	0.0	18
DD LEM		LOW END MODIFIER			GAL		10	865.0	1,335
BULK BARITE - BARIUM SULFATE		WEIGHTING MATERIAL			TON		14	22.55	135
DD TONE		ORGANOPHILLIC CLAY			LB SACK		31	147.0	253
DDF MUL		ALL IN ONE EMULSIFIER			GAL		40	825.0	1,375
LIME		ALKALINITY CONTROL			LB SACK		55	200.0	502
CALCIUM CHLORIDE		CALCIUM CHLORIDE			LB SACK		63	224.0	448
DD WET		WETTING AGENT			GAL		65	1,025.0	75
TECH SERVICE SUPPORT		SUPERVISION			EA	350	350	0.0	5,600
DIESEL - FOR MUD		OIL MUD ADDITIVE			GAL	7487	4515	14,893.0	58,683
Pump Operations									
Pump #	Make		Model		Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0
2	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0
3	GARDNER-DENVER		PZ-11-1600		5 1/2	11.00	0.081		7,500.0
Pump Checks									
Pump #	Depth (ftKB)		Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data									
Deviation Surveys									
Date			Description			Job			
11/5/2022 22:00			AS DRILL SURVEY			ODR, 11/5/2022 19:00			
Survey Data - All surveys for 24 hr reporting period									
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)		NS (ft)	EW (ft)	DLS (°/100ft)	
24,833.00	90.65	163.81	9,550.02	15,361.41		-14,564.46	5,071.55	0.96	
24,927.00	91.11	166.06	9,548.57	15,455.38		-14,655.22	5,095.98	2.44	
24,994.00	90.59	165.52	9,547.58	15,522.37		-14,720.16	5,112.42	1.12	
Formations									
Formation Name	Prog Top Override (TVD SS) (ft(elv))			Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)		Final Top (TVD) (ftKB)	
ILP	-6,563.0				9,552.0				
PBHL/TD	-6,563.0				9,552.0				
269_0_DEAN	-6,639.0				9,628.0				
304_0_STRAWN	-8,065.0				11,054.0				
Daily Contacts									
Job Contact			Title		Office	Mobile	Email		
POLYA, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM		
SPACEK, KYLE, ENGINEER			ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER			ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
HAHN, MICHAEL, SUPERINTENDENT			SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM		
JONES, JUSTIN, SUPERINTENDENT			SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM		
SUMPTER, BILLY, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM		
ASH, WARREN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			661-333-4101	WARREN.ASH@PXD.COM		
TRUPE, CODY, MUD ENGINEER			MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM		
RIG-H&P 417, RIG PHONE			RIG PHONE		361-489-3691		DL-HP417@PXD.COM		
Personnel Log									
Company								Count	
PIONEER NATURAL RESOURCES USA INC								2	
PIONEER NATURAL RESOURCES USA INC								1	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO								13	
BAKER HUGHES OILFIELD OPERATIONS INC								2	
MID CONTINENT WELL LOGGING SERVICE INC								2	
STALLION SOLIDS CONTROL INC								1	

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	542.00
Days Since RI:	542.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/10/2022
Report #:	20
DFS:	19
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$66,120.68

Daily Drilling Report

API/UWI 42-003-48493-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00003262	Property Sub	KB-Grd (ft) 26.00	Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022	TD Date 12/8/2022		
Jobs										
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/5/2022 19:00			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type		Subtype			Date		Note			
MILESTONE		ESTIMATED PAD RELEASE			2/9/2023		1st well on 6 well pad			
Daily Operations										
Footage/Meterage (ft) 0.00		Drilling Hours	% Rotating Time	End Depth (ftKB) 25,019.0	Target Depth (ftKB) 25,106.0	Daily Field Est Total \$66,120.68		Cum Field Est To Date \$2,918,129.48		
24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB) 9,547.3	Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$9,330.38	Cum Mud Field Est \$187,326.44	Total AFE + Sup \$3,910,360.88		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 0.0		Daily Goal - Next 24 0.0		Goal Comments Goal Met			
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 7,000.0ftKB				Next Casing String PRODUCTION, 25,008.0ftKB				
Avg Connection Gas 0.00		Avg Trip Gas 27.00	Avg Background Gas 0.00		Max Connection Gas 0.00		Max Trip Gas 28.00	Max Drill Gas 0.00		
Operations Summary Circ, raise mud weight from 8.6 ppg to 8.9 ppg, Wash and ream F/22,896 - T/25,019, Circ, raise mud weight F/8.9 ppg - T/9.1 Circ hole clean with 9.1 ppg mud										
Operations Next Report Period Circulate,TOOH F/25019', L/D Dir tools, Remove WB, Rig up and Run 5 1/2" prod casing.										
Operations At Report Time Circulate at 25,019'										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 100% Complete Savor Sub 23,030'. Daily NPT: 24 H&P: 2.25 3rd Party: 34.75 Pioneer: 37										
Time Log										
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	4.5	10:30	PROD, POST DRL	CIRC	NORMAL	Raise mud weight form 8.6 ppg to 8.9 ppg.due to caving's seen on shakers.	25,019.0	25,019.0	4.50	7
10:30	6.5	17:00	PROD, POST DRL	TIH_NONELEV	NORMAL	Wash and ream F/ 28,896' - T/25,019 GPM 543 RPM 100	25,019.0	25,019.0	6.50	7
17:00	9	02:00	PROD, POST DRL	CIRC	NORMAL	Circulate at 25,019'. GPM 450/555 RPM 110/90	25,019.0	25,019.0	9.00	7
02:00	4	06:00	PROD, POST DRL	CIRC	NORMAL	Raise mud weight form 8.9 ppg to 9.1 ppg. GPM 620 RPM 110	25,019.0	25,019.0	4.00	7
Interval Problems										
DOWNHOLE CONDITIONS, 25,019.0ftKB, 12/9/2022 00:30										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
7	29.50	No	WELLBORE	FORMATION INSTABILITY		PIONEER NATURAL RESOURCES USA INC	Raise mud weight to 8.9, Wash back to BTM, Raise mud weight to 9.1 Circ hole clean.			
Drill Strings										
BHA #5 , PRODUCTION - LATERAL										
Bit Run			Drill Bit 5 8 1/2, DD506TSX, 5333548			Bit Type PDC		Make GE/BAKER HUGHES		

Nozzles (1/32") 12/12/12/14/14/14		Bit Total Fluid Area (nozzles) (in²) 0.78		IADC Bit Dull -----		Hours Drilled By Bit (hr) 75.50		Depth Drilled By Bit (ft) 8,539.00			
BHA Drilling Time (hr) 75.50		BHA Depth Drilled (ft) 8,539.00		BHA ROP (ft/hr) 113.1		Depth In (ftKB) 16,480.0		Depth Out (ftKB) 25,019.0			
Drill String Components											
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make			
254	DRILL PIPE	5	4.28	8,003.75	25,019.00	156,073.1	505	RIG			
21	HWDP - SPIRALED	5	3.00	628.34	17,015.25	31,417.0	349	RIG			
516	DRILL PIPE	5	4.28	16,268.63	16,386.91	317,238.3	317	RIG			
1	SUB - FILTER	6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES			
1	MOTOR - STABILIZER SLEEVE	7	3.00	43.18	114.07		0	GE/BAKER HUGHES			
1	SUB - SHOCK	7	3.00	26.48	70.89		0	TOMAX			
1	STABILIZER	6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES			
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.27	38.31		0	GE/BAKER HUGHES			
1	RSS TOOL	7	4.33	9.34	10.04		0	GE/BAKER HUGHES			
Sensors											
Sensor Type		Sensor-Bit (ft)				Note					
GAMMA		12.24									
DIRECTIONAL		22.31									
Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)	
Mud Checks											
Time 12/9/2022 15:00		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 25,019.0	Density (lb/gal) 8.95	Funnel Viscosity (s/qt) 61	T Flowline (° F) 119.0		
pV (cP)	YP (lbf/100ft²) 11.000	Vis 3rpm 7	Vis 6rpm 7	Filtrate (mL/30min)	HTHP Filtrate (mL/30min) 8.4		HTHP Temperature (° F) 250.0		HTHP Pressure (psi) 500.0		
Solids (%) 10.0		Low Gravity Solids (%) 7.7			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
Chlorides (mg/L) 24,500		Calcium (mg/L) 4,800.000		CaCl (ppm) 0		Oil Water Ratio 74.4/25.6		Electric Stab (V) 479.0		Lime (lb/bbl) 3.0	pH
Gel 10 sec (lbf/100ft²) 9.000				Gel 10 min (lbf/100ft²) 16.000			Gel 30 min (lbf/100ft²) 20.000				
Comment											
Mud Checks											
Time 12/9/2022 08:30		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 25,019.0	Density (lb/gal) 8.80	Funnel Viscosity (s/qt) 61	T Flowline (° F) 117.0		
pV (cP)	YP (lbf/100ft²) 9.000	Vis 3rpm 6	Vis 6rpm 7	Filtrate (mL/30min)	HTHP Filtrate (mL/30min) 8.4		HTHP Temperature (° F) 250.0		HTHP Pressure (psi) 500.0		
Solids (%) 9.0		Low Gravity Solids (%) 6.9			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
Chlorides (mg/L) 24,500		Calcium (mg/L) 4,800.000		CaCl (ppm) 0		Oil Water Ratio 72.5/27.5		Electric Stab (V) 429.0		Lime (lb/bbl) 2.3	pH
Gel 10 sec (lbf/100ft²) 9.000				Gel 10 min (lbf/100ft²) 15.000			Gel 30 min (lbf/100ft²) 18.000				
Comment											
Last BOP Test											
Date		Test Type	Item Tested			Next Test Date		Com			
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW			
Leak Off and Formation Integrity Tests											
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)			
FORMATION INTEGRITY					1,969.0			13.00			
FORMATION INTEGRITY					7,000.0			9.50			
Casing Pressure Test											
Test Type	Test Subtype	Date			Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00	1,000.0	
CASING	STANDARD	11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0	
Kick Offs & Key Depths											
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
12/1/2022 09:30			KICK OFF		9,043.0			8,877.1			
12/1/2022 22:45			HEEL		10,236.0			9,527.9			
12/8/2022 08:30			TOE		25,019.0			9,547.3			
Casing Strings											
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)			OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)		
CONDUCTOR	106.0	106.0			20	H40	78.67				
SURFACE	1,969.0	1,968.0			13 3/8	J55	54.50	BTC	1,328.9		
INTERMEDIATE	7,000.0	6,846.6			9 5/8	L80-IC	40.00	BTC	3,378.7		
PRODUCTION	25,008.0	9,552.0			5 1/2	P110-IC	20.00	WEDGE 441			
Gas Emissions - Flare											
Type		Method			Dur (Min)		Amount	Units	Com		
No Data											
Job Supply Amounts											

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed	
DIESEL	FUEL	GAL		4732		Rig fuel	16,692	42350	
DIESEL	MUD	GAL		168		Mud Diesel	14,017	59559	
Mud Additive Amounts									
Des			Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH			SUPERVISION		EA	1	1	0.0	19
TRUCKING			MISCELLANEOUS		EA	1	1	0.0	17
PMDHYPDF-A200			SHAKER SCREEN		EA		6	34.0	22
BULK BARITE - BARIUM SULFATE			WEIGHTING MATERIAL		TON	20.02	9.57	33.0	144
SOLTEX			FILTRATE CONTROL		LB SACK		16	50.0	16
DD TONE			ORGANOPHILIC CLAY		LB SACK		19	128.0	272
XMP GILSONITE			FILTRATE CONTROL		LB SACK		20	34.0	28
DD WET			WETTING AGENT		GAL		25	1,000.0	100
LIME			ALKALINITY CONTROL		LB SACK		30	170.0	532
DDF MUL			ALL IN ONE EMULSIFIER		GAL		70	755.0	1,445
TECH SERVICE SUPPORT			SUPERVISION		EA	350	350	0.0	5,950
Pump Operations									
Pump #	Make		Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER		PZ-11-1600	5 1/2		11.00	0.081		7,500.0
2	GARDNER-DENVER		PZ-11-1600	5 1/2		11.00	0.081		7,500.0
3	GARDNER-DENVER		PZ-11-1600	5 1/2		11.00	0.081		7,500.0
Pump Checks									
Pump #	Depth (ftKB)		Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data									
Deviation Surveys									
Date			Description			Job			
11/5/2022 22:00			AS DRILL SURVEY			ODR, 11/5/2022 19:00			
Formations									
Formation Name	Prog Top Override (TVD SS) (ft(elv))			Prog Top MD (ftKB)		Prog Top (TVD) (ftKB)		Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP	-6,563.0					9,552.0			
PBHL/TD	-6,563.0					9,552.0			
269_0_DEAN	-6,639.0					9,628.0			
304_0_STRAWN	-8,065.0					11,054.0			
Daily Contacts									
Job Contact			Title		Office	Mobile	Email		
POLYA, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM		
SPACEK, KYLE, ENGINEER			ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER			ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
HAHN, MICHAEL, SUPERINTENDENT			SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM		
JONES, JUSTIN, SUPERINTENDENT			SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM		
SUMPTER, BILLY, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM		
ASH, WARREN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			661-333-4101	WARREN.ASH@PXD.COM		
TRUPE, CODY, MUD ENGINEER			MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM		
RIG-H&P 417, RIG PHONE			RIG PHONE		361-489-3691		DL-HP417@PXD.COM		
Personnel Log									
Company								Count	
PIONEER NATURAL RESOURCES USA INC								2	
PIONEER NATURAL RESOURCES USA INC								1	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO								13	
BAKER HUGHES OILFIELD OPERATIONS INC								2	
MID CONTINENT WELL LOGGING SERVICE INC								2	
STALLION SOLIDS CONTROL INC								1	

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	543.00
Days Since RI:	543.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/11/2022
Report #:	21
DFS:	20
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$96,399.19

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date 12/8/2022			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype					Date		Note						
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad						
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 25,019.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$96,399.19		Cum Field Est To Date \$3,014,528.67			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 9,547.3		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$6,835.41		Cum Mud Field Est \$194,161.85		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 0.0				Goal Comments Goal Met			
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 7,000.0ftKB					Next Casing String PRODUCTION, 25,008.0ftKB						
Avg Connection Gas 0.00		Avg Trip Gas 26.00		Avg Background Gas 0.00			Max Connection Gas 0.00		Max Trip Gas 26.00		Max Drill Gas 0.00				
Operations Summary															
Raise mud weight to 9.1 and finish circ, Pump and back ream F/ 25,019.T/23,635' Packed off, Pipe became stuck, Work stuck pipe. Rig up wireline.															
Operations Next Report Period															
R/U wireline with Tractor Run free point and back off, TOO H, P/U Fishing tools.															
Operations At Report Time															
Rigging up wireline to run free point.															
Remarks															
No Accidents, Incidents or Spills Reported															
Surface: 100% Complete															
Intermediate: 100% Complete															
Production Vert: 100% Complete															
Production Curve: 100% Complete															
Production Lateral: 100% Complete															
Savor Sub 23,030'.															
Daily NPT: 24															
H&P: 2.25															
3rd Party: 34.75															
Pioneer: 37															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #			
06:00	1.25	07:15	PROD, POST DRL	CIRC	NORMAL	Circulate at 25,019'. GPM 625 RPM 100			25,019.0	25,019.0	1.25	7			
07:15	5	12:15	PROD, POST DRL	TOOH_NONELEV	NORMAL	Pump and Back ream out F/25,019' -T/ 23,635' to mantin ECD due to hole instability and dimond back frac next door GPM 550/250 RPM 30/100 TQ 12/24			25,019.0	25,019.0	5.00	8			
12:15	16.25	04:30	PROD, POST DRL	3RD_PTY	FISHING	Packed off at 23,635', Work stuck pipe with no circulation or sucess. Wait on Tractor tool.			25,019.0	25,019.0	16.25	8			
04:30	0.5	05:00	PROD, POST DRL	SFTY	FISHING	Held safety MTG with VES and rig crew			25,019.0	25,019.0	0.50	8			
05:00	1	06:00	PROD, POST DRL	RU_WL	FISHING	R/U Wireline free point tool.			25,019.0	25,019.0	1.00	8			
Interval Problems															
DOWNHOLE CONDITIONS, 25,019.0ftKB, 12/9/2022 00:30															
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description	Est Cost OR (Cost)	Accountable Party			Comment					
7	30.75	No		WELLBORE	FORMATION INSTABILITY		PIONEER NATURAL RESOURCES USA INC			Raise mud weight to 8.9, Wash back to BTM, Raise mud weight to 9.1 Circ hole clean.					

DOWNHOLE CONDITIONS, ftKB, 12/10/2022 07:15											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment				
8		No	STUCK	WORK STRING		PIONEER NATURAL RESOURCES USA INC	Stuck pipe while back reaming, Due to hole instability, Work stuck pipe.				
Drill Strings											
BHA #5 , PRODUCTION - LATERAL											
Bit Run			Drill Bit			Bit Type		Make			
5			8 1/2, DD506TSX, 5333548			PDC		GE/BAKER HUGHES			
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)		
12/12/12/14/14/14			0.78		-----		75.50		8,539.00		
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)		
75.50			8,539.00		113.1		16,480.0		25,019.0		
Drill String Components											
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lb)	Cum Wt (1000lb)	Make	
254	DRILL PIPE			5	4.28	8,003.75	25,019.00	156,073.1	505	RIG	
21	HWDP - SPIRALED			5	3.00	628.34	17,015.25	31,417.0	349	RIG	
516	DRILL PIPE			5	4.28	16,268.63	16,386.91	317,238.3	317	RIG	
1	SUB - FILTER			6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES	
1	MOTOR - STABILIZER SLEEVE			7	3.00	43.18	114.07		0	GE/BAKER HUGHES	
1	SUB - SHOCK			7	3.00	26.48	70.89		0	TOMAX	
1	STABILIZER			6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES	
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	28.27	38.31		0	GE/BAKER HUGHES	
1	RSS TOOL			7	4.33	9.34	10.04		0	GE/BAKER HUGHES	
Sensors											
Sensor Type			Sensor-Bit (ft)				Note				
GAMMA			12.24								
DIRECTIONAL			22.31								
Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)	
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)		
12/10/2022 17:00		PIONEER DRILLING FLUIDS			OIL BASE	25,019.0	9.10	60	65.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	11.000	6	6			7.2		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
10.0		6.5									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
26,500		5,600.000		0		74.4/25.6		433.0		3.0	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)			
8.000				14.000				17.000			
Comment											
CCI - NO PSI											
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)		
12/10/2022 10:00		PIONEER DRILLING FLUIDS			OIL BASE	25,019.0	9.10	61	116.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	11.000	6	7			7.2		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
10.0		6.4									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
27,000		5,600.000		0		74.4/25.6		479.0		3.3	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)			
9.000				16.000				20.000			
Comment											
CCI - NO PSI											
Last BOP Test											
Date		Test Type	Item Tested			Next Test Date		Com			
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW			
Leak Off and Formation Integrity Tests											
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)			
FORMATION INTEGRITY					1,969.0			13.00			
FORMATION INTEGRITY					7,000.0			9.50			
Casing Pressure Test											
Test Type	Test Subtype	Date			Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00	1,000.0	
CASING	STANDARD	11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0	
Kick Offs & Key Depths											
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
12/1/2022 09:30			KICK OFF		9,043.0			8,877.1			
12/1/2022 22:45			HEEL		10,236.0			9,527.9			

12/8/2022 08:30	TOE		25,019.0		9,547.3			
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0	106.0	20	H40	78.67			
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	3,378.7	
PRODUCTION	25,008.0	9,552.0	5 1/2	P110-IC	20.00	WEDGE 441		
Gas Emissions - Flare								
Type	Method	Dur (Min)	Amount	Units	Com			
No Data								
Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL		2042		Rig fuel	14,650	44392
DIESEL	MUD	GAL	14977	19069		Mud Diesel (#50769, 50752)	9,925	78628
Mud Additive Amounts								
Des	Type	Units	Rec	Consumed	On Loc	Cum Cons		
PMDHYPDF-A200	SHAKER SCREEN	EA	16	1	49.0	23		
DRILLING FLUID TECH	SUPERVISION	EA	1	1	0.0	20		
XMP GILSONITE	FILTRATE CONTROL	LB SACK		2	32.0	30		
BULK BARITE - BARIUM SULFATE	WEIGHTING MATERIAL	TON		7	26.0	151		
DD TONE	ORGANOPHILLIC CLAY	LB SACK		8	120.0	280		
CALCIUM CHLORIDE	CALCIUM CHLORIDE	LB SACK		31	193.0	479		
LIME	ALKALINITY CONTROL	LB SACK		39	131.0	571		
DD LEM	LOW END MODIFIER	GAL		40	825.0	1,375		
DDF MUL	ALL IN ONE EMULSIFIER	GAL		125	630.0	1,570		
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	6,300		
DIESEL - FOR MUD	OIL MUD ADDITIVE	GAL	7491	12156	10,228.0	70,839		
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)		
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0		
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)		
No Data								
Deviation Surveys								
Date	Description	Job						
11/5/2022 22:00	AS DRILL SURVEY	ODR, 11/5/2022 19:00						
Formations								
Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)			
ILP	-6,563.0		9,552.0					
PBHL/TD	-6,563.0		9,552.0					
269_0_DEAN	-6,639.0		9,628.0					
304_0_STRAWN	-8,065.0		11,054.0					
Daily Contacts								
Job Contact	Title	Office	Mobile	Email				
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM				
SPACEK, KYLE, ENGINEER	ENGINEER	432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM				
LUTHER, JACKIE, ENGINEER	ENGINEER	972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM				
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM				
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM				
SUMPTER, BILLY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-813-0762	BILLY.SUMPTER@PXD.COM				
ASH, WARREN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		661-333-4101	WARREN.ASH@PXD.COM				
TRUPE, CODY, MUD ENGINEER	MUD ENGINEER		405-664-3414	CODY.TRUPE@PXD.COM				
RIG-H&P 417, RIG PHONE	RIG PHONE	361-489-3691		DL-HP417@PXD.COM				
Personnel Log								
Company	Count							
PIONEER NATURAL RESOURCES USA INC	2							
PIONEER NATURAL RESOURCES USA INC	1							
HELMERICH & PAYNE INTERNATIONAL DRILLING CO	13							
BAKER HUGHES OILFIELD OPERATIONS INC	2							
MID CONTINENT WELL LOGGING SERVICE INC	2							
STALLION SOLIDS CONTROL INC	1							

H & P 417	
Accept:	11/22/2022
Release:	
Days Since LTI:	544.00
Days Since RI:	544.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/12/2022
Report #:	22
DFS:	21
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$52,509.41

Daily Drilling Report

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date 12/8/2022			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/5/2022 19:00				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype					Date		Note						
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad						
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 25,019.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$52,509.41		Cum Field Est To Date \$3,067,038.08			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 9,547.3		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$11,214.11		Cum Mud Field Est \$205,375.96		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 0.0				Goal Comments Goal Met			
Backbuild Yes	Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 7,000.0ftKB						Next Casing String PRODUCTION, 25,008.0ftKB						
Avg Connection Gas 0.00		Avg Trip Gas 25.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 26.00		Max Drill Gas 0.00			
Operations Summary Rig up to run wireline, Cut & slip drlg line, rig service, Work stuck pipe while waiting on tractor, Pipe came free, Pump and back ream F/23,635-T/21,865', Circ hole clean, Pump and backream F/21,865' T/20,000'.															
Operations Next Report Period Pump and Back ream, TOO H when able, L/D Dir tools.															
Operations At Report Time Backreaming out of hole															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 100% Complete Savor Sub 23,030'. Daily NPT: 24 H&P: 2.25 3rd Party: 34.75 Pioneer: 37															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #			
06:00	1	07:00	PROD, POST DRL	RU_WL	FISHING	R/U Wireline free point tool.			25,019.0	25,019.0	1.00	8			
07:00	1	08:00	PROD, POST DRL	SLIP_CUT	FISHING	Cut and slip drlg line.			25,019.0	25,019.0	1.00	8			
08:00	0.5	08:30	PROD, POST DRL	RIG_SVC	FISHING	Rig Service.			25,019.0	25,019.0	0.50	8			
08:30	5	13:30	PROD, POST DRL	WAIT	FISHING	Work pipe free while waiting on tractor to arrive on location.			25,019.0	25,019.0	5.00	8			
13:30	7.5	21:00	PROD, POST DRL	TOOH_NONELEV	NORMAL	Pump and Back ream out F/23,635' -T/ 21,865' to maintain ECD due to hole instability and dimond back frac next door GPM 450 RPM 60 TQ 12/17			25,019.0	25,019.0	7.50	9			
21:00	5	02:00	PROD, POST DRL	CIRC	NORMAL	Circulate hole clean., Work stand while circulating Stage pumps up to 620 GPM. Stage rotary up to 100 rpm.			25,019.0	25,019.0	5.00	9			
02:00	4	06:00	PROD, POST DRL	TOOH_NONELEV	NORMAL	Pump and Back ream out F/21,865' -T/ 20,000' to maintain ECD due to hole instability and dimond back frac next door GPM 620 RPM 50 TQ 12/17			25,019.0	25,019.0	4.00	9			

Interval Problems											
DOWNHOLE CONDITIONS, 25,019.0ftKB, 12/10/2022 07:15											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment				
8	30.25	No	STUCK	WORK STRING		PIONEER NATURAL RESOURCES USA INC	Stuck pipe while back reaming, Due to hole instability, Work stuck pipe.				
DOWNHOLE CONDITIONS, ftKB, 12/11/2022 13:30											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment				
9		No	WELLBORE	FORMATION INSTABILITY		PIONEER NATURAL RESOURCES USA INC	Pump and Back ream out F/23,635' to maintain ECD due to hole instability and dimond back frac next door				
Drill Strings											
BHA #5 , PRODUCTION - LATERAL											
Bit Run			Drill Bit			Bit Type		Make			
5 8 1/2, DD506TSX, 5333548						PDC		GE/BAKER HUGHES			
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)		
12/12/12/14/14/14			0.78		-----		75.50		8,539.00		
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)		
75.50			8,539.00		113.1		16,480.0		25,019.0		
Drill String Components											
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make	
254	DRILL PIPE			5	4.28	8,003.75	25,019.00	156,073.1	505	RIG	
21	HWDP - SPIRALED			5	3.00	628.34	17,015.25	31,417.0	349	RIG	
516	DRILL PIPE			5	4.28	16,268.63	16,386.91	317,238.3	317	RIG	
1	SUB - FILTER			6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES	
1	MOTOR - STABILIZER SLEEVE			7	3.00	43.18	114.07		0	GE/BAKER HUGHES	
1	SUB - SHOCK			7	3.00	26.48	70.89		0	TOMAX	
1	STABILIZER			6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES	
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	28.27	38.31		0	GE/BAKER HUGHES	
1	RSS TOOL			7	4.33	9.34	10.04		0	GE/BAKER HUGHES	
Sensors											
Sensor Type			Sensor-Bit (ft)				Note				
GAMMA			12.24								
DIRECTIONAL			22.31								
Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)	
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)		
12/11/2022 17:00		PIONEER DRILLING FLUIDS			OIL BASE	25,019.0	9.20	60	115.0		
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	10.000	6	6			8.0		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
11.0		7.7									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
28,500		5,600.000		0		74.2/25.8		471.0		2.3	
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
8.000				13.000				18.000			
Comment											
Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)		
12/11/2022 11:00		PIONEER DRILLING FLUIDS			OIL BASE	25,019.0	9.10	62	69.0		
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	11.000	6	7			8.0		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
10.0		6.4									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
26,500		4,800.000		0		74.4/25.6		441.0		2.5	
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
9.000				15.000				20.000			
Comment											
Last BOP Test											
Date		Test Type	Item Tested			Next Test Date		Com			
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW			
Leak Off and Formation Integrity Tests											
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY						1,969.0		13.00			
FORMATION INTEGRITY						7,000.0		9.50			
Casing Pressure Test											
Test Type	Test Subtype		Date		Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD		11/8/2022 11:00		SURFACE, 1,969.0ftKB			No	30.00	1,000.0	
CASING	STANDARD		11/29/2022 20:00		INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0	

Kick Offs & Key Depths								
Date		Type	Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
12/1/2022 09:30		KICK OFF	9,043.0		8,877.1			
12/1/2022 22:45		HEEL	10,236.0		9,527.9			
12/8/2022 08:30		TOE	25,019.0		9,547.3			
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0	106.0	20	H40	78.67			
SURFACE	1,969.0	1,968.0	13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0	6,846.6	9 5/8	L80-IC	40.00	BTC	3,378.7	
PRODUCTION	25,008.0	9,552.0	5 1/2	P110-IC	20.00	WEDGE 441		
Gas Emissions - Flare								
Type	Method	Dur (Min)		Amount		Units	Com	
No Data								
Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL		4692		Rig fuel	9,958	49084
DIESEL	MUD	GAL		1077		Mud Diesel	8,848	79705
Mud Additive Amounts								
Des		Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH		SUPERVISION		EA	1	1	0.0	21
TRUCKING		MISCELLANEOUS		EA	2	2	0.0	19
SODA ASH		HARDNESS MODIFIER		LB SACK		6	-6.0	6
BULK BARITE - BARIUM SULFATE		WEIGHTING MATERIAL		TON	19.98	8.98	37.0	160
SOLTEX		FILTRATE CONTROL		LB SACK		10	40.0	26
LIME		ALKALINITY CONTROL		LB SACK	150	10	271.0	581
DD WET		WETTING AGENT		GAL		15	985.0	115
DD TONE		ORGANOPHILLIC CLAY		LB SACK	50	16	154.0	296
CALCIUM CHLORIDE		CALCIUM CHLORIDE		LB SACK	200	41	352.0	520
DD LEM		LOW END MODIFIER		GAL	275	70	1,030.0	1,445
DDF MUL		ALL IN ONE EMULSIFIER		GAL	550	145	1,035.0	1,715
TECH SERVICE SUPPORT		SUPERVISION		EA	350	350	0.0	6,650
DIESEL - FOR MUD		OIL MUD ADDITIVE		GAL	7486	7724	9,990.0	78,563
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081		7,500.0	
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data								
Deviation Surveys								
Date		Description		Job				
11/5/2022 22:00		AS DRILL SURVEY		ODR, 11/5/2022 19:00				
Formations								
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)		Final Top (TVD) (ftKB)	
ILP	-6,563.0			9,552.0				
PBHL/TD	-6,563.0			9,552.0				
269_0_DEAN	-6,639.0			9,628.0				
304_0_STRAWN	-8,065.0			11,054.0				
Daily Contacts								
Job Contact		Title		Office	Mobile	Email		
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM		
SPACEK, KYLE, ENGINEER		ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM		
LUTHER, JACKIE, ENGINEER		ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM		
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM		
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM		
SUMPTER, BILLY, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM		
ASH, WARREN, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			661-333-4101	WARREN.ASH@PXD.COM		
TRUPE, CODY, MUD ENGINEER		MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM		
RIG-H&P 417, RIG PHONE		RIG PHONE		361-489-3691		DL-HP417@PXD.COM		
Personnel Log								
Company							Count	
PIONEER NATURAL RESOURCES USA INC							2	
PIONEER NATURAL RESOURCES USA INC							1	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13	
BAKER HUGHES OILFIELD OPERATIONS INC							2	
MID CONTINENT WELL LOGGING SERVICE INC							2	
STALLION SOLIDS CONTROL INC							1	

H & P 417	
Accept:	11/22/2022
Release:	12/13/2022
Days Since LTI:	546.00
Days Since RI:	546.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/13/2022
Report #:	24
DFS:	22
AFE #:	9019715
Total AFE + Sup:	\$3,910,360.88
Daily Field Est. (Cost):	\$131,466.95

API/UWI 42-003-48493-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00003262		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,989.00		Ground Elevation (ft) 2,963.00		Spud Date 11/5/2022		TD Date 12/8/2022			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type	Start Date			End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR	11/5/2022 19:00			12/13/2022 20:00		COMPLETE		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype					Date		Note						
MILESTONE		ESTIMATED PAD RELEASE					2/9/2023		1st well on 6 well pad						
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 25,019.0		Target Depth (ftKB) 25,106.0		Daily Field Est Total \$131,466.95		Cum Field Est To Date \$3,362,697.07			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 9,547.5		Target Depth Depth (TVD) (ftKB) 9,552.0		Daily Mud Field Est Total \$951.00		Cum Mud Field Est \$218,664.70		Total AFE + Sup \$3,910,360.88	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0				Daily Goal - Next 24 0.0				Goal Comments Goal Met			
Backbuild Yes	Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 7,000.0ftKB						Next Casing String PRODUCTION, 25,008.0ftKB						
Avg Connection Gas 0.00		Avg Trip Gas 25.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 26.00		Max Drill Gas 0.00			
Operations Summary Make up storm packer on drill pipe, RIH T/ 5,037', set packer and displace OBM With 10.0 PPG Brine water, TOO H, Set Isolation bushing & BPV, N/D BOP install TA cap, Release rig to University 7-2 E 5H															
Operations Next Report Period Released rig to the University 7-20E 5H															
Operations At Report Time Release Rig to the University 7-20E 5H															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate: 100% Complete Production Vert: 100% Complete Production Curve: 100% Complete Production Lateral: 100% Complete Savor Sub 23,030'. Daily NPT: 9.5 H&P: 2.25 3rd Party: 34.75 Pioneer: 88.5															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #			
06:00	0.5	06:30	PROD, POST DRL	LD_DIR	NORMAL	L/D Directional BHA.			25,019.0	25,019.0					
06:30	1	07:30	PROD, POST DRL	WRBSH	NORMAL	Pull wear bushing and clean rig floor.			25,019.0	25,019.0					
07:30	1.5	09:00	PROD, POST DRL	PU_BHA	NORMAL	P/U Storm Packer assembly.			25,019.0	25,019.0					
09:00	4.5	13:30	PROD, POST DRL	TIH_ELEV	NORMAL	TIH T/5,037' and set Storm packer. Test packer T/500 psi. Test good			25,019.0	25,019.0					
13:30	2	15:30	PROD, POST DRL	CIRC	NORMAL	Circ on top of Packer displacing OBM with10.0 ppg BW.			25,019.0	25,019.0					
15:30	2.5	18:00	PROD, POST DRL	TOOH_ELEV	NORMAL	TOH T/Surface.			25,019.0	25,019.0					
18:00	0.5	18:30	PROD, POST DRL	L/D BHA	NORMAL	L/D runing tool.			25,019.0	25,019.0					
18:30	0.5	19:00	DEMOB, RIG DOWN	WH	NORMAL	Install Isolation bushing, pressure test void between seals to 5,000 psi, pull test to 40k, Good test. Set 5" back pressure valve.			25,019.0	25,019.0					
19:00	0.75	19:45	DEMOB, RIG DOWN	ND_BOPE	NORMAL	ND BOP, remove flowline and RD flow line manifold, RD mud lines and choke line.			25,019.0	25,019.0					
19:45	0.25	20:00	DEMOB, RIG DOWN	WH	NORMAL	Install TA cap and test to 5,000 psi for 15 min. Good test. Release rig to University 7-20E 5H on 12/13/2022 @ 20:00 hrs.			25,019.0	25,019.0					

Drill Strings										
BHA #5 , PRODUCTION - LATERAL										
Bit Run		Drill Bit				Bit Type		Make		
5		8 1/2, DD506TSX, 5333548				PDC		GE/BAKER HUGHES		
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)		
12/12/12/14/14/14		0.78		2-4-BT-S-X-0-WT-TD		75.50		8,539.00		
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)		
75.50		8,539.00		113.1		16,480.0		25,019.0		
Drill String Components										
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make	
254	DRILL PIPE		5	4.28	8,003.75	25,019.00	156,073.1	505	RIG	
21	HWDP - SPIRALED		5	3.00	628.34	17,015.25	31,417.0	349	RIG	
516	DRILL PIPE		5	4.28	16,268.63	16,386.91	317,238.3	317	RIG	
1	SUB - FILTER		6 1/2	3.31	4.21	118.28		0	GE/BAKER HUGHES	
1	MOTOR - STABILIZER SLEEVE		7	3.00	43.18	114.07		0	GE/BAKER HUGHES	
1	SUB - SHOCK		7	3.00	26.48	70.89		0	TOMAX	
1	STABILIZER		6 3/4	2.81	6.10	44.41		0	GE/BAKER HUGHES	
1	MWD TOOL - NON-RETRIEVABLE		7	3.25	28.27	38.31		0	GE/BAKER HUGHES	
1	RSS TOOL		7	4.33	9.34	10.04		0	GE/BAKER HUGHES	
Sensors										
Sensor Type			Sensor-Bit (ft)			Note				
GAMMA			12.24							
DIRECTIONAL			22.31							
Hydraulic Calculations										
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
Mud Checks										
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)	
12/13/2022 09:45		PIONEER DRILLING FLUIDS			OIL BASE	25,019.0	9.35	65	55.0	
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)	HTHP Pressure (psi)		
	10.000	6	6		8.0		250.0	500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)	MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
12.0		8.8								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)	Oil Water Ratio		Electric Stab (V)	Lime (lb/bbl)	pH	
26,500		5,200.000		0	73.9/26.1		433.0	2.3		
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)			Gel 30 min (lbf/100ft²)			
9.000				16.000			20.000			
Comment										
CCI - NO PSI										
Last BOP Test										
Date		Test Type	Item Tested			Next Test Date		Com		
11/24/2022 13:00		BOP	BOP'S, 11/22/2022 22:30			12/15/2022 13:00		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests										
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)		
FORMATION INTEGRITY					1,969.0			13.00		
FORMATION INTEGRITY					7,000.0			9.50		
Casing Pressure Test										
Test Type	Test Subtype	Date			Item Tested			Failed?	Time (min)	P (psi)
CASING	STANDARD	11/8/2022 11:00			SURFACE, 1,969.0ftKB			No	30.00	1,000.0
CASING	STANDARD	11/29/2022 20:00			INTERMEDIATE, 7,000.0ftKB			No	30.00	2,500.0
Kick Offs & Key Depths										
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)		
12/1/2022 09:30			KICK OFF		9,043.0			8,877.2		
12/1/2022 22:45			HEEL		10,236.0			9,528.0		
12/8/2022 08:30			TOE		25,019.0			9,547.5		
Casing Strings										
Description	Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.0		106.0		20	H40	78.67			
SURFACE	1,969.0		1,968.0		13 3/8	J55	54.50	BTC	1,328.9	
INTERMEDIATE	7,000.0		6,846.6		9 5/8	L80-IC	40.00	BTC	3,378.7	
PRODUCTION	25,008.0		9,552.0		5 1/2	P110-IC	20.00	WEDGE 441		
Gas Emissions - Flare										
Type		Method		Dur (Min)		Amount		Units	Com	
No Data										
Job Supply Amounts										
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc	Cum Consumed	
WATER	FRESH	BBL	8838	8838	0	Water meter End 453,808		0	14850.16	
Mud Additive Amounts										
Des			Type			Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH			SUPERVISION			EA	1	1	0.0	23
TECH SERVICE SUPPORT			SUPERVISION			EA	1	1	0.0	7,001
DIESEL - FOR MUD			OIL MUD ADDITIVE			GAL		187	0.0	82,749

Pump Operations						
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0
2	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0
3	GARDNER-DENVER	PZ-11-1600	5 1/2	11.00	0.081	7,500.0
Pump Checks						
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
No Data						
Deviation Surveys						
Date		Description		Job		
11/5/2022 22:00		AS DRILL SURVEY		ODR, 11/5/2022 19:00		
Date		Description		Job		
12/8/2022 11:10		FINAL SURVEY		ODR, 11/5/2022 19:00		
Formations						
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP	-6,563.0			9,552.0		
PBHL/TD	-6,563.0			9,552.0		
269_0_DEAN	-6,639.0			9,628.0		
304_0_STRAWN	-8,065.0			11,054.0		
Daily Contacts						
Job Contact		Title		Office	Mobile	Email
POLYA, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT		432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
SPACEK, KYLE, ENGINEER		ENGINEER		432-571-2800	432-438-0187	KYLE.SPACEK@PXD.COM
LUTHER, JACKIE, ENGINEER		ENGINEER		972-969-5626	303-512-3803	JACKIE.LUTHER@PXD.COM
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@PXD.COM
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@PXD.COM
SUMPTER, BILLY, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			432-813-0762	BILLY.SUMPTER@PXD.COM
ASH, WARREN, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			661-333-4101	WARREN.ASH@PXD.COM
TRUPE, CODY, MUD ENGINEER		MUD ENGINEER			405-664-3414	CODY.TRUPE@PXD.COM
RIG-H&P 417, RIG PHONE		RIG PHONE		361-489-3691		DL-HP417@PXD.COM
Personnel Log						
Company						Count
PIONEER NATURAL RESOURCES USA INC						2
PIONEER NATURAL RESOURCES USA INC						1
HELMERICH & PAYNE INTERNATIONAL DRILLING CO						13
BAKER HUGHES OILFIELD OPERATIONS INC						2
MID CONTINENT WELL LOGGING SERVICE INC						2
STALLION SOLIDS CONTROL INC						1