

H & P 417

Accept:12/13/2022

Release:

Days Since LTI:553.00

Days Since RI:553.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:02/23/2023

Report #:10

DFS:9

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$215,932.09

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/10/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 379.00		Drilling Hours 3.95	% Rotating Time 100.00		End Depth (ftKB) 7,389.0		Target Depth (ftKB) 24,337.0		Daily Field Est Total \$215,932.09		Cum Field Est To Date \$1,897,895.90
24 HR ROP (ft/hr) 95.9	Circulating Hours 0.32	% Sliding Time 0.00	End Depth (TVD) (ftKB) 7,235.8		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$4,312.90		Cum Mud Field Est \$78,564.88	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 0.0			Daily Goal - Next 24 1,500.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB					Next Casing String PROPOSED PRODUCTION, 24,337.0ftKB				
Avg Connection Gas 81.00		Avg Trip Gas 90.00		Avg Background Gas 85.00		Max Connection Gas 81.00		Max Trip Gas 104.00		Max Drill Gas 112.00	
Operations Summary Walk Rig, NU BOPE & Test., install wear bushing, PU 8.75" DO BHA, TIH, test csg, drill cmt & ST, drill 10' new formation T/7,020', circ, F.I.T, TOH for 8.5" RSS BHA, PU BHA, TIH, Drill 8.5" Prod Vert. w/RSS T/7,389'. SD: 7,081', Inc: 12.56°, Amz: 8.11°, Avg DLS: 1.39°, Below: 19', Left: 1'											
Operations Next Report Period Drill 8.5" Prod Vert. w/RSS T/8,979', Drill Prod Curve w/RSS.											
Operations At Report Time Drilling 8.5" Prod Vert w/RSS @ 7,389'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 26% Complete Production Curve: 0 % Complete Production Lateral: 0% Complete  Savor Sub:379' Daily NPT:0 H&P:0 3rd Party:0 Pioneer: 13.25											
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	SFTY	NORMAL	PJSM with H&P on rig skid		7,010.0	7,010.0		
06:15	0.25	06:30	PROD, PRE DRL	SKID	NORMAL	Walk F/University 7-20D 5H.		7,010.0	7,010.0		
06:30	0.25	06:45	PROD, PRE DRL	NU_BOPE	NORMAL	Nipple up 36" Spacer spool and BOPE.		7,010.0	7,010.0		
06:45	0.25	07:00	PROD, PRE DRL	SFTY	NORMAL	PJSM with H&P & Walker testers on test BOPE.		7,010.0	7,010.0		
07:00	1.5	08:30	PROD, PRE DRL	TEST_BOPE	NORMAL	Test BOP Rams 250psi Low / 5,000psi High, floor valves & mud pumps 250psi Low / 6,200psi High, Annular 250psi Low / 3500psi High.		7,010.0	7,010.0		
08:30	0.25	08:45	PROD, PRE DRL	WRBSH	NORMAL	Install wear bushing.		7,010.0	7,010.0		
08:45	0.25	09:00	PROD, PRE DRL	SFTY	NORMAL	PJSM with H&P & Baker on P/U BHA		7,010.0	7,010.0		
09:00	0.25	09:15	PROD, PRE DRL	HDL_BHA	NORMAL	Pick up 8.75" Drill Out BHA.		7,010.0	7,010.0		
09:15	3.75	13:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/BHA T/6,815', correct displacement.		7,010.0	7,010.0		
13:00	0.5	13:30	PROD, PRE DRL	HDL_ROTHD	NORMAL	Install rotating head.		7,010.0	7,010.0		
13:30	0.75	14:15	PROD, PRE DRL	CSG_TEST	NORMAL	Test Csg to 2,500psi for 30 mins, good test.		7,010.0	7,010.0		
14:15	2.25	16:30	PROD, PRE DRL	DRL_OUT	NORMAL	Drill out cement & shoe track F/6,908' T/6,997', RPM:30, GPM's:335, WOB:5-10, TQ:7K. F/C: 6,908' Shoe 6,997' Rat hole 7,010'		7,010.0	7,010.0		
16:30	0.25	16:45	PROD, PRE DRL	DRL	NORMAL	Drill 10' New Formation F/7,010' T/7,020', (10' @		7,010.0	7,020.0		

						40 fph), WOB:10, RPM:30, GPM:335, SPP:700 psi, Diff:300 psi, TQ:.6K, with full returns.				
16:45	0.5	17:15	PROD, PRE DRL	CIRC	NORMAL	Circulate BU, displace hole w/OBM prior to FIT.	7,020.0	7,020.0		
17:15	0.25	17:30	PROD, PRE DRL	FIT	NORMAL	Perform FIT to EMW:9.5 w/ AMW:8.7 @ 285 psi(6,865' TVD). Test good.	7,020.0	7,020.0		
17:30	0.5	18:00	PROD, PRE DRL	FLOW_CHK	NORMAL	Flow check, well static.	7,020.0	7,020.0		
18:00	0.5	18:30	PROD, PRE DRL	HDL_ROTHD	NORMAL	Remove Rot. head & install trip nipple.	7,020.0	7,020.0		
18:30	2	20:30	PROD, PRE DRL	TOOH_ELEV	NORMAL	TOH for 8.5" Dir BHA F/7,020' T/BHA, hole taking correct fill.	7,020.0	7,020.0		
20:30	0.25	20:45	PROD, PRE DRL	SFTY	NORMAL	Safety Meeting clean rig floor prior to PU RSS	7,020.0	7,020.0		
20:45	0.25	21:00	PROD, PRE DRL	LD_DIR	NORMAL	Break bit & LD DO Mtr.	7,020.0	7,020.0		
21:00	0.75	21:45	PROD, PRE DRL	PU_DIR	NORMAL	Pick up 8.5" Baker RSS BHA #4 Bit:8.5" Reed TKC66 RSS AutoTrak	7,020.0	7,020.0		
21:45	1.25	23:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/BHA T/3,000', with proper displacement.	7,020.0	7,020.0		
23:00	0.75	23:45	PROD, PRE DRL	CIRC	NORMAL	Downlink RSS, (Recycle 2X)	7,020.0	7,020.0		
23:45	1.75	01:30	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/3,000' T/7,020', with proper displacement.	7,020.0	7,020.0		
01:30	0.5	02:00	PROD, PRE DRL	CIRC	NORMAL	Fill pipe, break circulation & down link RSS.	7,020.0	7,020.0		
02:00	4	06:00	PROD, DRL	DRL	NORMAL	Drill 8.5" Prod Vert F/7,020 T/7,389' (369 @ 93 fph), WOB:35, GPM 600, SPP:2600, Diff:800, RPM:60, TQ:10K, with full returns. SD: 7,081', Inc: 12.56°, Amz: 8.11°, Avg DLS: 1.39°, Below: 19', Left: 1'	7,020.0	7,389.0		

Drill Strings				
BHA #4 , 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-WT-A-X-0-NO-BHA	0.28	10.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
0.28	10.00	35.7	7,010.0	7,020.0

Drill String Components									
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
220	DRILL PIPE		5	4.28	6,970.12	7,020.00	135,917.3	136	RIG
1	SUB - FILTER		6 11/16	3.31	3.77	49.88		0	DRILLING TOOLS INTERNATIONAL
1	MOTOR - STABILIZER SLEEVE		7	3.00	41.20	46.11		0	GE/BAKER HUGHES
1	SUB -BIT		6 7/16	2.25	3.99	4.91		0	RIG

Mud Motors							
SN		Bend Angle		Bearing Type		Lobe Config	
15845392		0		SEALED		7:8	
						6.4	

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 (°)
02:10	04:36	7,020.0	183.00	75.3	19	38	357.0	510	2,494.0	91.0	161	161	161	161	7.0	7.0	
04:36	06:00	7,203.0	186.00	150.0	19	38	357.0	510	2,494.0	91.0	161	161	161	161	7.0	7.0	
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)	
8.65		8.78	103.2		1.8		210.4	346.8	14.3		581.8		130.02	16.11		360.37	
Mud Checks																	
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)		
2/22/2023 16:00		PIONEER DRILLING FLUIDS				OIL BASE		7,020.0		8.65		62			91.0		
pV (cP)	YP (lbF/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)				
	7.000		5	5			8.0			250.0			500.0				
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)			
10.0		8.3															
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)			Lime (lb/bbl)		pH		
29,500			3,200.000			0		73.9/26.1		561.0			2.5				
Gel 10 sec (lbF/100ft²)					Gel 10 min (lbF/100ft²)					Gel 30 min (lbF/100ft²)							
10.000					15.000					18.000							
Comment																	
CCI - NO PSI																	
Mud Checks																	
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)		
2/22/2023 11:00		PIONEER DRILLING FLUIDS				OIL BASE		7,010.0		8.60		63			70.0		
pV (cP)	YP (lbF/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)				
	8.000		5	5			8.0			250.0			500.0				
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)			
10.0		8.3															
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)			Lime (lb/bbl)		pH		
29,500			3,200.000			0		73.3/26.7		556.0			2.5				
Gel 10 sec (lbF/100ft²)					Gel 10 min (lbF/100ft²)					Gel 30 min (lbF/100ft²)							
10.000					16.000					18.000							
Comment																	
CCI - NO PSI																	
Last BOP Test																	
Date			Test Type		Item Tested				Next Test Date			Com					
2/22/2023 08:30			BOP		BOP'S, 12/13/2022 20:00				3/15/2023 08:30			Test BOP 5000 High /250 LOW					
Leak Off and Formation Integrity Tests																	
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)					
FORMATION INTEGRITY								1,957.0				12.96					
FORMATION INTEGRITY								7,020.0				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, 1,950.0ftKB					No	30.00		1,000.0		
CASING		STANDARD		2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB					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			1,950.0		1,949.5			13 3/8	J55	54.50		BTC		1,317.7			
INTERMEDIATE			6,997.0		6,852.9			9 5/8	P110	40.00		BTC		3,392.3			
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	5023	0		Transferred from' UNIVERSITY 7-20D 4H'					5,023		17542		
WATER		FRESH		BBL	0	0		Water Meter Start: 6,765					0		6012.16		
DIESEL		FUEL AUXILIARY		GAL	19616	0		Transferred from' UNIVERSITY 7-20D 4H'					19,616		0		
DIESEL		MUD		GAL	3672	0		Transferred from' UNIVERSITY 7-20D 4H'					3,672		26332		
DIESEL		MUD		GAL	7507	0		Mud Diesel (Ticket #57050)					11,179		26332		
DIESEL		FUEL		GAL	7517	1434		Rig Fuel (Ticket #57067)					11,106		18976		
Mud Additive Amounts																	
Des					Type				Units		Rec	Consumed		On Loc		Cum Cons	
DRILLING FLUID TECH					SUPERVISION				EA		2	2		0.0		11	
BULK BARITE - BARIUM SULFATE					WEIGHTING MATERIAL				TON		36.11	3		33.11		49	
DD WET					WETTING AGENT				GAL		550	5		545.0		5	
BULK TANK BLOWERS					MISCELLANEOUS				PER DAY		8	8		0.0		8	
STANDBY TIME					MISCELLANEOUS				PER HOUR		9	9		0.0		9	

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 (%)	
1	7,198.0	2/23/2023 04:00	550.0	50	161	95	
1	7,198.0	2/23/2023 04:00	398.0	30	97	95	
1	7,198.0	2/23/2023 04:00	484.0	40	129	95	
2	7,198.0	2/23/2023 04:00	565.0	50	161	95	
2	7,198.0	2/23/2023 04:00	470.0	40	129	95	
2	7,198.0	2/23/2023 04:00	390.0	30	97	95	
Deviation Surveys							
Date		Description	Job				
11/7/2022 09:45		AS DRILL SURVEY	ODR, 11/4/2022 09:30				
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
7,018.00	11.21	74.78	6,873.48	25.05	262.24	1,146.01	0.37
7,081.00	12.56	78.11	6,935.12	25.20	265.26	1,158.62	2.40
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		8,430.0	8,610.0		
ALT_ICP2		-5,493.0		8,483.0			
267_5_SPBY_M_A1		-5,753.0		8,743.0	9,002.0		
ILP		-5,910.0		8,900.0			
PBHL/TD		-5,898.0		8,888.0			
268_5_SPBY_L_A1		-5,984.0		8,974.0			
268_5_SPBY_L_A2		-6,033.0		9,023.0			
268_5_SPBY_L_A3		-6,117.0		9,107.0			
268_6_SPBY_L_B1/JO MILL		-6,272.0		9,262.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0		9,311.0			
269_0_DEAN		-6,639.0		9,629.0			
304_0_STRAWN		-8,065.0		11,055.0			
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		
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		
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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							3
STALLION SOLIDS CONTROL INC							1

H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	554.00
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PERMIAN ASSET TEAM	
Job:	ODR
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DFS:	10
AFE #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$114,474.62

Daily Drilling Report

API/UWI 42-003-48492-0000			Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00036584		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022		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		11/4/2022 09:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype			Date		Note								
MILESTONE		ESTIMATED PAD RELEASE			3/10/2023		Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.								
Daily Operations															
Footage/Meterage (ft) 2,077.00			Drilling Hours 23.28		% Rotating Time 100.00		End Depth (ftKB) 9,466.0		Target Depth (ftKB) 24,337.0		Daily Field Est Total \$114,474.62		Cum Field Est To Date \$2,077,737.72		
24 HR ROP (ft/hr) 89.2		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 8,927.6		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$9,509.47		Cum Mud Field Est \$88,074.35		Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 1,500.0				Daily Goal - Next 24 3,000.0				Goal Comments Goal Met			
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 6,997.0ftKB					Next Casing String PROPOSED PRODUCTION, 24,337.0ftKB						
Avg Connection Gas 268.00			Avg Trip Gas 0.00		Avg Background Gas 212.00			Max Connection Gas 713.00			Max Trip Gas 0.00		Max Drill Gas 789.00		
Operations Summary															
Drill 8.5" Prod Vert. w/RSS T/8,944', Drill 8.5" Prod Crv w/RSS T/9,466'. (Land Crv @ 9,466') SD: 9,347', Inc: 76.53°, Amz: 170.89°, DLN: 11°, Above: 10', Right: 4'															
Operations Next Report Period															
Drill 8.5" Production Lateral w/RSS per Baker plan.															
Operations At Report Time															
Drilling 8.5" Production Curve w/RSS @ 9,466'.															
Remarks															
No Accidents, Incidents or Spills Reported															
Surface: 100% Complete															
Intermediate1: 100% Complete															
Production Vert: 100% Complete															
Production Curve: 100 % Complete															
Production Lateral: 0% Complete															
Savor Sub:2,456'															
Daily NPT:0															
H&P:0															
3rd Party:0															
Pioneer: 13.25															
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		DRL	NORMAL	Drill 8.5" Prod Vert F/7,389' T/7,863' (474' @ 190 fph), WOB:35, GPM 600, SPP:2600, Diff:800, RPM:60, TQ:10K, with full returns.			7,389.0		7,863.0			
08:30	0.5	09:00	PROD, DRL		HDL_ROT HD	NORMAL	C/O Rotating head.			7,863.0		7,863.0			
09:00	2	11:00	PROD, DRL		DRL	NORMAL	Drill 8.5" Prod Vert F/7,863' T/8,444' (581' @ 291 fph), WOB:35, GPM 600, SPP:2600, Diff:800, RPM:60, TQ:10K, with full returns.			7,863.0		8,444.0			
11:00	19	06:00	PROD, DRL CURVE		DRL	NORMAL	Drill 8.5" Prod Curve F/8,444' T/9,466' (1,022' @ 54 fph), WOB:20-35, GPM:485, SPP:2,100, Diff:500, RPM:60, TQ:10K, with full returns. (Landed @ 9,466') SD: 9,347', Inc: 76.53°, Amz: 170.89°, DLN: 11°, Above: 10', Right: 4'			8,444.0		9,466.0			
Drill Strings															
BHA #5 , PRODUCTION - VERTICAL/CURVE															
Bit Run			Drill Bit 4 8 1/2, TKC66-A1, A294897					Bit Type PDC			Make REED				
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					0.78					-----					26.95					2,446.00				
BHA Drilling Time (hr)					BHA Depth Drilled (ft)					BHA ROP (ft/hr)					Depth In (ftKB)					Depth Out (ftKB)				
26.95					2,446.00					90.8					7,020.0					9,466.0				
Drill String Components																								
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)			Wt (lbf)	Cum Wt (1000lbf)			Make									
297	DRILL PIPE				5	4.28	7,344.80	7,466.00			143,223.6	143			RIG									
1	SUB - FILTER				6 3/4	2.25	3.77	121.20				0			GE/BAKER HUGHES									
1	MOTOR - STABILIZER SLEEVE				7 1/8	1.81	41.20	117.43				0			GE/BAKER HUGHES									
1	ANTI-STALL TOOL				7	3.00	26.56	76.23				0			ARSENAL									
1	STABILIZER				7	2.88	11.13	49.67				0			GE/BAKER HUGHES									
1	MWD TOOL - NON-RETRIEVABLE				7	3.25	28.25	38.54				0			GE/BAKER HUGHES									
1	RSS TOOL				7	4.33	9.29	10.29				0			GE/BAKER HUGHES									
Mud Motors																								
SN			Bend Angle			Bearing Type			Lobe Config			# Stages		Lwr Defin Type			Bit To Bend							
15845392			0			SEALED			7:8			6.4					0							
Sensors																								
Sensor Type				Sensor-Bit (ft)						Note														
NEAR BIT INCLINOMETER				6.93																				
GAMMA				22.39																				
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	08:22	7,389.0	470.00	198.3	22	57	679.0	568	3,174.0	233.0	158	158	158	158	9.0	9.0								
08:48	10:56	7,859.0	585.00	274.6	31	60	790.0	597	3,581.0	315.0	158	158	158	158	10.0	10.0								
11:11	03:54	8,444.0	928.00	55.5	21	74	336.0	478	2,385.0	64.0	187	187	187	187	9.0	9.0								
03:54	06:00	9,372.0	94.00	45.6	17	73	300.0	476	2,339.0	62.0	190	190	190	190	9.0	9.0								
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)				
8.40		8.49		81.5		1.4		196.4		293.4		13.3		543.0		166.91		111.45		360.37				
Mud Checks																								
Time			Mud Company					Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)							
2/23/2023 18:30			PIONEER DRILLING FLUIDS					OIL BASE		8,833.0		8.40		65			105.0							
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				8.8			250.0			500.0								
Solids (%)			Low Gravity Solids (%)					Sand (%)			MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)							
9.5			7.8																					
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)			pH						
30,000			3,200.000			0			74.6/25.4			622.0			3.4									
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)												
10.000						14.000						17.000												
Comment																								
Mud Checks																								
Time			Mud Company					Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)							
2/23/2023 11:00			PIONEER DRILLING FLUIDS					OIL BASE		8,446.0		8.50		63			96.0							
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		6				8.8			250.0			500.0								
Solids (%)			Low Gravity Solids (%)					Sand (%)			MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)							
10.0			8.3																					
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)			pH						
29,500			3,200.000			0			74.4/25.6			572.0			2.9									
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)												
11.000						16.000						18.000												
Comment																								
Last BOP Test																								
Date			Test Type		Item Tested					Next Test Date					Com									
2/22/2023 08:30			BOP		BOP'S, 12/13/2022 20:00					3/15/2023 08:30					Test BOP 5000 High /250 LOW									
Leak Off and Formation Integrity Tests																								
Test Type										Depth (ftKB)					Dens Fluid (lb/gal)									
FORMATION INTEGRITY										1,957.0					12.96									
FORMATION INTEGRITY										7,020.0					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, 1,950.0ftKB					No		30.00			1,000.0						
CASING		STANDARD			2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB					No		30.00			2,500.0						
Kick Offs & Key Depths																								
Date					Type			Top Depth (ftKB)					Depth Top (TVD) (ftKB)											
2/23/2023 11:00					KICK OFF			8,444.0					8,276.5											
2/24/2023 06:00					HEEL			9,466.0					8,927.6											
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		1,950.0		1,949.5	13 3/8	J55	54.50	BTC		1,317.7
INTERMEDIATE		6,997.0		6,852.9	9 5/8	P110	40.00	BTC		3,392.3
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 AUXILIARY	GAL	0	0		Spare Rig Diesel Tank (Winter)		19,616	0	
DIESEL	FUEL	GAL	0	2610		Rig Fuel		8,496	21586	
DIESEL	MUD	GAL	7509	3583		Mud Diesel		15,105	29915	
Mud Additive Amounts										
Des		Type			Units	Rec	Consumed	On Loc	Cum Cons	
DRILLING FLUID TECH		SUPERVISION			EA	1	1	0.0	12	
PMDHYPDF-A200		SHAKER SCREEN			EA		4	13.0	4	
SOLTEX		FILTRATE CONTROL			LB SACK		10	45.0	10	
XMP GILSONITE		FILTRATE CONTROL			LB SACK		10	50.0	10	
DD TONE		ORGANOPHILLIC CLAY			LB SACK		27	118.0	27	
LIME		ALKALINITY CONTROL			LB SACK		75	100.0	83	
CALCIUM CHLORIDE		CALCIUM CHLORIDE			LB SACK		80	328.0	80	
DD LEM		LOW END MODIFIER			GAL		90	945.0	90	
DDF MUL		ALL IN ONE EMULSIFIER			GAL		145	995.0	145	
TECH SERVICE SUPPORT		SUPERVISION			EA	350	350	0.0	2,800	
DIESEL - FOR MUD		OIL MUD ADDITIVE			GAL	7509	3583	27,935.0	3,583	
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	9,370.0		2/24/2023 04:00		618.0		40	129		95
1	9,370.0		2/24/2023 04:00		720.0		50	161		95
1	9,370.0		2/24/2023 04:00		535.0		30	97		95
2	9,370.0		2/24/2023 04:00		620.0		40	129		95
2	9,370.0		2/24/2023 04:00		713.0		50	161		95
2	9,370.0		2/24/2023 04:00		520.0		30	97		95
Deviation Surveys										
Date			Description			Job				
11/7/2022 09:45			AS DRILL SURVEY			ODR, 11/4/2022 09:30				
Survey Data - All surveys for 24 hr reporting period										
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)		VS (ft)		NS (ft)	EW (ft)	DLS (°/100ft)	
7,459.00	16.79	76.85	7,299.67		27.09		287.72	1,255.72	0.29	
7,553.00	15.27	77.66	7,390.02		27.70		293.45	1,281.04	1.63	
7,648.00	11.83	76.57	7,482.36		28.20		298.39	1,302.74	3.63	
7,743.00	7.21	74.36	7,576.03		28.16		302.26	1,317.96	4.88	
7,838.00	3.45	69.15	7,670.60		27.66		304.88	1,326.37	3.99	
7,932.00	0.68	28.70	7,764.53		26.92		306.38	1,329.28	3.15	
8,027.00	0.09	143.65	7,859.53		26.58		306.82	1,329.60	0.76	
8,122.00	0.29	32.29	7,954.53		26.48		306.96	1,329.77	0.35	
8,216.00	0.26	132.95	8,048.53		26.49		307.01	1,330.06	0.45	
8,311.00	0.17	74.27	8,143.53		26.67		306.91	1,330.35	0.24	
8,406.00	0.12	16.24	8,238.53		26.58		307.04	1,330.51	0.16	
8,501.00	6.33	162.22	8,333.34		31.73		302.14	1,332.14	6.77	
8,596.00	15.82	164.83	8,426.46		49.94		284.62	1,337.14	10.00	
8,691.00	26.27	164.94	8,515.00		84.01		251.73	1,346.02	11.00	
8,785.00	32.44	167.54	8,596.90		130.05		206.98	1,356.87	6.70	
8,873.00	40.42	165.13	8,667.65		182.26		156.27	1,369.31	9.21	
8,968.00	46.83	161.58	8,736.39		247.68		93.56	1,388.18	7.22	
9,063.00	54.16	160.31	8,796.78		320.65		24.34	1,412.13	7.78	
9,158.00	61.34	168.04	8,847.50		400.81		-52.87	1,433.80	10.21	
9,252.00	69.90	170.20	8,886.27		486.21		-136.88	1,449.89	9.34	
9,347.00	76.53	170.89	8,913.69		576.81		-226.54	1,464.81	7.01	
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)
268_5_SPBY_L_A1			-5,984.0				8,974.0			
268_5_SPBY_L_A2			-6,033.0				9,023.0			
268_5_SPBY_L_A3			-6,117.0				9,107.0			
268_6_SPBY_L_B1/JO MILL			-6,272.0				9,262.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE			-6,321.0				9,311.0			
269_0_DEAN			-6,639.0				9,629.0			

304_0_STRAWN	-8,065.0		11,055.0	
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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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				3
MID CONTINENT WELL LOGGING SERVICE INC				3
STALLION SOLIDS CONTROL INC				1



H & P 417

Accept:12/13/2022

Release:

Days Since LTI:573.00

Days Since RI:573.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:02/25/2023

Report #:12

DFS:11

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$136,369.51

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584	Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type	Subtype		Date	Note						
MILESTONE	ESTIMATED PAD RELEASE		3/10/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.						
Daily Operations										
Footage/Meterage (ft) 3,018.00		Drilling Hours 23.45	% Rotating Time 100.00	End Depth (ftKB) 12,484.0	Target Depth (ftKB) 24,337.0	Daily Field Est Total \$136,369.51		Cum Field Est To Date \$2,207,095.23		
24 HR ROP (ft/hr) 128.7	Circulating Hours 0.32	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,928.6	Target Depth Depth (TVD) (ftKB) 8,888.5	Daily Mud Field Est Total \$9,691.63		Cum Mud Field Est \$97,765.98	Total AFE + Sup \$3,912,010.11		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0		Daily Goal - Next 24 3,000.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PROPOSED PRODUCTION, 24,337.0ftKB				
Avg Connection Gas 370.00		Avg Trip Gas 0.00	Avg Background Gas 382.00		Max Connection Gas 702.00		Max Trip Gas 0.00	Max Drill Gas 805.00		
Operations Summary										
Drill 8.5" Prod Lat. w/RSS T/10,879', Safety Stand Down, Drill 8.5" Prod Lat. w/RSS T/12,484'. SD: 12,174', Inc: 90.07°, Amz: 166.38°, Avg DL: 1.14°, Above: 1', Right: 3'										
Operations Next Report Period										
Drill 8.5" Prod Lat. w/RSS per Baker plan.										
Operations At Report Time										
Drilling 8.5" Production Lateral w/RSS @ 12,484'.										
Remarks										
No Accidents, Incidents or Spills Reported										
Surface: 100% Complete										
Intermediate1: 100% Complete										
Production Vert: 100% Complete										
Production Curve: 100 % Complete										
Production Lateral: 21% Complete										
Savor Sub:5,474'										
Daily NPT:0										
H&P:0										
3rd Party:0										
Pioneer: 13.25										
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	11	17:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/9,466' T/10,879' (1,413' @ 123 fph), WOB:45, GPM:600, SPP:3,000, Diff:800, RPM:80, TQ:15K, with full returns.	9,466.0	10,879.0		
17:00	0.5	17:30	PROD, DRL LAT	SFTY_ NPT	NORMAL	Safety stand down on dropped objects, communication, accountability, Taking the time to do things right, Culture, Safety awareness, stopping the Job & caught in-between. (Day Tour)	10,879.0	10,879.0	0.50	2
17:30	0.5	18:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/10,879' T/10,971' (92' @ 184 fph), WOB:20-35, GPM:485, SPP:2,100, Diff:500, RPM:80, TQ:10K, with full returns.	10,879.0	10,971.0		
18:00	0.5	18:30	PROD, DRL LAT	SFTY_ NPT	NORMAL	Safety stand down on dropped objects, communication, accountability, Taking the time to do things right, Culture, Safety awareness, stopping the Job & caught in-between. (Night Tour)	10,971.0	10,971.0	0.50	3
18:30	11.5	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/10,971' T/12,484' (1,513' @ 132 fph), WOB:45, GPM:600, SPP:3,000,	10,971.0	12,484.0		

						Diff:800, RPM:80, TQ:15K, with full returns. SD: 12,174', Inc: 90.07°, Amz: 166.38°, Avg DL: 1.14°, Above: 1', Right: 3'				
--	--	--	--	--	--	--	--	--	--	--

Interval Problems

SURFACE CONDITION, 10,879.0ftKB, 2/24/2023 17:00										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
2	0.50	No	HSE	SAFETY	0.00	PIONEER NATURAL RESOURCES USA INC	Safety stand down on dropped objects, communication, accountability, Taking the time to do things right, Culture, Safety awareness, stopping the Job & caught in-between. (Day Tour)			

SURFACE CONDITION, 10,971.0ftKB, 2/24/2023 18:00										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
3	0.50	No	HSE	SAFETY	0.00	PIONEER NATURAL RESOURCES USA INC	Safety stand down on dropped objects, communication, accountability, Taking the time to do things right, Culture, Safety awareness, stopping the Job & caught in-between. (Night Tour)			

Drill Strings

BHA #5 , PRODUCTION - VERTICAL/CURVE										
Bit Run			Drill Bit			Bit Type		Make		
4			8 1/2, TKC66-A1, A294897			PDC		REED		
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		-----		50.40		5,464.00	
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)	
50.40			5,464.00		108.4		7,020.0		12,484.0	

Drill String Components								
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
390	DRILL PIPE	5	4.28	12,362.80	12,484.00	241,074.6	241	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	121.20		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7 1/8	1.81	41.20	117.43		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	7	3.00	26.56	76.23		0	ARSENAL
1	STABILIZER	7	2.88	11.13	49.67		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.25	38.54		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.29	10.29		0	GE/BAKER HUGHES

Mud Motors						
SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15845392	0	SEALED	7:8	6.4		0

Sensors										
Sensor Type				Sensor-Bit (ft)				Note		
NEAR BIT INCLINOMETER				6.93						
GAMMA				22.39						

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	17:19	9,466.0	1,413.00	124.8	36	88	575.0	564	3,256.0	147.0	173	173	173	173	11.0	11.0	
17:19	17:38	10,879.0	0.00		1	25	0.0	569	2,868.0	0.0	209	209	209	209	0.0	0.0	
17:41	04:32	10,879.0	1,416.00	130.5	38	79	475.0	598	3,507.0	147.0	173	173	173	173	11.0	11.0	
04:32	06:00	12,295.0	189.00	147.7	38	79	475.0	598	3,507.0	147.0	173	173	173	173	11.0	11.0	

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	8.64	162.5	2.9	246.7	465.8	16.8	682.2	220.52	249.97	360.37	

Mud Checks												
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)
2/24/2023 16:00		PIONEER DRILLING FLUIDS			OIL BASE	10,743.0		8.45		65		110.0
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	11.000	7	7			8.0		250.0		500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
9.0					7.3							
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
30,000		3,600.000			0		74.7/25.3		641.0		4.2	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)				
12.000				16.000				20.000				

Mud Checks											
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
2/24/2023 09:45		PIONEER DRILLING FLUIDS			OIL BASE	9,966.0	8.50	63		104.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	10.000	6	7			8.0		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
9.5		7.9									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
29,000		3,200.000		0		75.1/24.9		637.0		3.6	

Gel 10 sec (lb/100ft²)			Gel 10 min (lb/100ft²)			Gel 30 min (lb/100ft²)			
11.000			15.000			18.000			
Comment									
Last BOP Test									
Date		Test Type	Item Tested		Next Test Date		Com		
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00		3/15/2023 08:30		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests									
Test Type				Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY				1,957.0		12.96			
FORMATION INTEGRITY				7,020.0		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, 1,950.0ftKB		No	30.00	1,000.0	
CASING	STANDARD	2/22/2023 13:30		INTERMEDIATE, 6,997.0ftKB		No	30.00	2,500.0	
Kick Offs & Key Depths									
Date		Type		Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
2/23/2023 11:00		KICK OFF		8,444.0		8,276.5			
2/24/2023 06:00		HEEL		9,466.0		8,929.4			
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	1,950.0		1,949.5		13 3/8	J55	54.50	BTC	1,317.7
INTERMEDIATE	6,997.0		6,852.9		9 5/8	P110	40.00	BTC	3,392.3
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	7515	9451		Mud Diesel		13,169	39366
DIESEL	FUEL	GAL	0	2904		Rig Fuel		5,592	24490
DIESEL	FUEL AUXILIARY	GAL	0	0		Spare Rig Diesel Tank (Winter)		19,616	0
Mud Additive Amounts									
Des		Type			Units	Rec	Consumed	On Loc	Cum Cons
PMDHYPDF-A200		SHAKER SCREEN			EA		1	12.0	5
TRUCKING		MISCELLANEOUS			EA	1	1	0.0	7
DRILLING FLUID TECH		SUPERVISION			EA	1	1	0.0	13
BULK TANK BLOWERS		MISCELLANEOUS			PER DAY	2	2	0.0	10
XMP GILSONITE		FILTRATE CONTROL			LB SACK		15	35.0	25
DD TONE		ORGANOPHILLIC CLAY			LB SACK	50	18	150.0	45
CALCIUM CHLORIDE		CALCIUM CHLORIDE			LB SACK		88	240.0	168
LIME		ALKALINITY CONTROL			LB SACK	300	100	300.0	183
DD LEM		LOW END MODIFIER			GAL		120	825.0	210
DDF MUL		ALL IN ONE EMULSIFIER			GAL	550	130	1,415.0	275
TECH SERVICE SUPPORT		SUPERVISION			EA	350	350	0.0	3,150
DIESEL - FOR MUD		OIL MUD ADDITIVE			GAL	7515	9451	25,999.0	13,034
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	12,294.0		2/25/2023 04:30		710.0	40		129	95
1	12,294.0		2/25/2023 04:30		620.0	30		97	95
1	12,294.0		2/25/2023 04:30		780.0	50		161	95
2	12,294.0		2/25/2023 04:30		550.0	30		97	95
2	12,294.0		2/25/2023 04:30		770.0	50		161	95
2	12,294.0		2/25/2023 04:30		695.0	40		129	95
Deviation Surveys									
Date			Description			Job			
11/7/2022 09:45			AS DRILL SURVEY			ODR, 11/4/2022 09:30			
Survey Data - All surveys for 24 hr reporting period									
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)		
9,536.00	89.68	163.70	8,931.48	764.25	-410.17	1,503.20	6.89		
9,630.00	89.75	164.26	8,931.95	858.19	-500.51	1,529.14	0.60		
9,725.00	90.16	165.16	8,932.02	953.17	-592.15	1,554.19	1.04		
9,819.00	89.89	165.50	8,931.98	1,047.17	-683.09	1,578.00	0.46		
9,913.00	89.89	166.51	8,932.16	1,141.17	-774.29	1,600.73	1.07		
10,007.00	90.04	166.83	8,932.22	1,235.16	-865.76	1,622.41	0.38		
10,102.00	90.66	166.77	8,931.64	1,330.14	-958.25	1,644.10	0.66		
10,197.00	88.96	165.08	8,931.95	1,425.14	-1,050.39	1,667.20	2.52		

10,291.00	90.97	164.46	8,932.01	1,519.11	-1,141.08	1,691.89	2.24
10,385.00	90.93	165.44	8,930.45	1,613.09	-1,231.85	1,716.30	1.04
10,473.00	91.03	165.48	8,928.95	1,701.07	-1,317.01	1,738.39	0.12
10,568.00	89.95	166.84	8,928.13	1,796.06	-1,409.25	1,761.11	1.83
10,663.00	90.01	165.66	8,928.17	1,891.06	-1,501.53	1,783.69	1.24
10,757.00	90.69	165.68	8,927.59	1,985.06	-1,592.60	1,806.95	0.72
10,851.00	89.89	164.83	8,927.12	2,079.05	-1,683.50	1,830.88	1.24
10,946.00	90.16	166.96	8,927.08	2,174.04	-1,775.63	1,854.03	2.26
11,041.00	90.19	166.39	8,926.79	2,269.03	-1,868.07	1,875.92	0.60
11,135.00	89.46	166.12	8,927.07	2,363.03	-1,959.38	1,898.26	0.83
11,230.00	89.18	166.50	8,928.20	2,458.02	-2,051.67	1,920.74	0.50
11,324.00	90.78	166.27	8,928.23	2,552.01	-2,143.03	1,942.87	1.72
11,418.00	89.33	165.75	8,928.14	2,646.01	-2,234.24	1,965.59	1.64
11,513.00	89.86	166.18	8,928.81	2,741.01	-2,326.40	1,988.63	0.72
11,607.00	90.44	166.59	8,928.57	2,835.00	-2,417.76	2,010.75	0.76
11,702.00	89.36	165.55	8,928.73	2,930.00	-2,509.96	2,033.62	1.58
11,796.00	90.66	164.66	8,928.72	3,023.99	-2,600.80	2,057.79	1.68
11,890.00	90.50	164.85	8,927.77	3,117.96	-2,691.49	2,082.50	0.26
11,985.00	89.49	165.48	8,927.77	3,212.95	-2,783.32	2,106.82	1.25
12,079.00	89.46	164.52	8,928.64	3,306.94	-2,874.11	2,131.15	1.02
12,174.00	90.07	166.38	8,929.03	3,401.93	-2,966.06	2,155.02	2.06

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)
268_5_SPBY_L_A1	-5,984.0		8,974.0		
268_5_SPBY_L_A2	-6,033.0		9,023.0		
268_5_SPBY_L_A3	-6,117.0		9,107.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,311.0		
269_0_DEAN	-6,639.0		9,629.0		
304_0_STRAWN	-8,065.0		11,055.0		

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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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	3
MID CONTINENT WELL LOGGING SERVICE INC	3
STALLION SOLIDS CONTROL INC	1

H & P 417

Accept:

12/13/2022

Release:

Days Since LTI:

574.00

Days Since RI:

574.00

PERMIAN ASSET TEAM

Job:

ODR

Report Date:

02/26/2023

Report #:

13

DFS:

12

AFE #:

9019710

Total AFE + Sup:

\$3,912,010.11

Daily Field Est. (Cost):

\$133,673.27

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type	Subtype		Date	Note						
MILESTONE	ESTIMATED PAD RELEASE		3/10/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.						
Daily Operations										
Footage/Meterage (ft) 637.00		Drilling Hours 8.22	% Rotating Time 100.00		End Depth (ftKB) 13,121.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$133,673.27		Cum Field Est To Date \$2,340,768.50
24 HR ROP (ft/hr) 77.5	Circulating Hours 0.38	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,932.5		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$10,180.23		Cum Mud Field Est \$107,946.21	Total AFE + Sup \$3,912,010.11
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0			Daily Goal - Next 24 2,000.0			Goal Comments Goal not met	
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PROPOSED PRODUCTION, 24,337.0ftKB				
Avg Connection Gas 348.00		Avg Trip Gas 123.00		Avg Background Gas 371.00		Max Connection Gas 621.00		Max Trip Gas 192.00		Max Drill Gas 716.00
Operations Summary										
Drill Prod Lat. w/RSS T/13,121', Trouble shoot Dir. tools & PR, TOH, change BHA, TIH T/9,000'. SD: 13,028', Inc: 90.04°, Amz:166.28°, Avg DLS: 1.38°, Below:1', Left:6'										
Operations Next Report Period										
TIH, Drill 8.5" Prod Lat. w/RSS per Baker plan.										
Operations At Report Time										
TIH with 8.5" Prod Lat. BHA @ 9,000'.										
Remarks										
No Accidents, Incidents or Spills Reported										
Surface: 100% Complete										
Intermediate1: 100% Complete										
Production Vert: 100% Complete										
Production Curve: 100 % Complete										
Production Lateral: 25% Complete										
Savor Sub:6,111'										
Daily NPT:20.25										
H&P:0										
3rd Party:20.25										
Pioneer: 13.25										
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	3.75	09:45	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/12,484' T/12,770' (286' @ 76 fph), WOB:45, GPM:600, SPP:3,000, Diff:800, RPM:80, TQ:15K, with full returns.	12,484.0	12,770.0		
09:45	5.25	15:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/12,770' T/13,121' (351' @ 67 fph), WOB:45, GPM:600, SPP:3,000, Diff:800, RPM:80, TQ:15K, with full returns. (Drilling while trouble shoot Dir. tools vibration & decoding) SD: 13,028', Inc: 90.04°, Amz:166.28°, Avg DLS: 1.38°, Below:1', Left:6'	12,770.0	13,121.0	5.25	4
15:00	2	17:00	PROD, DRL LAT	CIRC	NORMAL	Circulate prior to TOH for BHA.	13,121.0	13,121.0	2.00	4
17:00	0.5	17:30	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH pull 10 stds wet, F/13,121' T/12,196', hole taking proper fill.	13,121.0	13,121.0	0.50	4
17:30	0.25	17:45	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow check, well static.	13,121.0	13,121.0	0.25	4
17:45	3.25	21:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/12,191' T/6,997', hole taking proper fill. (Change breaks on DP & HWDP)	13,121.0	13,121.0	3.25	4
21:00	0.5	21:30	PROD, DRL LAT	HDL_ROT HD	NORMAL	Pull Rot head & install trip nipple.	13,121.0	13,121.0	0.50	4
21:30	2.25	23:45	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/6,997' T/BHA, hole taking proper fill.	13,121.0	13,121.0	2.25	4

23:45	0.25	00:00	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on LD BHA.	13,121.0	13,121.0	0.25	4
00:00	0.75	00:45	PROD, DRL LAT	LD_DIR	NORMAL	L/D BHA**(BHA #5)**.	13,121.0	13,121.0	0.75	4
00:45	0.5	01:15	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, drop inspection, clean & prep rig floor to PU BHA.	13,121.0	13,121.0	0.50	4
01:15	0.25	01:30	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on PU BHA.	13,121.0	13,121.0	0.25	4
01:30	0.75	02:15	PROD, DRL LAT	PU_DIR	NORMAL	Pick up Baker RSS BHA #6 Bit:8.5" Reed TKC66-Q1 RSS AutoTrak	13,121.0	13,121.0	0.75	4
02:15	1.5	03:45	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/BHA T/3,000'. with proper displacemnet.	13,121.0	13,121.0	1.50	4
03:45	0.25	04:00	PROD, DRL LAT	CIRC	NORMAL	Test Dir tools, MWD & run dianostics on RSS.	13,121.0	13,121.0	0.25	4
04:00	2	06:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/3,000 T/9,000'. with proper displacemnet.	13,121.0	13,121.0	2.00	4

Interval Problems

DIRECTIONAL, ftKB, 2/25/2023 09:45

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
4		No	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Heavy shock and vibe at the tool. Unable to stabilize Inc & Az, PR dropped off, TOH for BHA, bit damaged on shoulder cutters worn down to matrix, motor could not be drained seemed to be locked up.

Drill Strings

BHA #5 , PRODUCTION - VERTICAL/CURVE

Bit Run	Drill Bit		Bit Type	Make
4	8 1/2, TKC66-A1, A294897		PDC	REED
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	2-8-BT-S-X-1-WT-PR	58.62	6,101.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
58.62	6,101.00	104.1	7,020.0	13,121.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
410	DRILL PIPE	5	4.28	12,999.80	13,121.00	253,496.1	253	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	121.20		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7 1/8	1.81	41.20	117.43		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	7	3.00	26.56	76.23		0	ARSENAL
1	STABILIZER	7	2.88	11.13	49.67		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	28.25	38.54		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.29	10.29		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr DefIn Type	Bit To Bend
15845392	0	SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	6.93	
GAMMA	22.39	

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	09:05	12,484.0	252.00	81.8	36	64	490.0	598	3,680.0	100.0	171	171	171	171	12.0	12.0	
09:19	10:35	12,736.0	116.00	91.3	40	78	563.0	598	3,717.0	98.0	166	166	166	166	14.0	14.0	
10:51	12:33	12,852.0	153.00	90.0	42	62	505.0	571	3,658.0	105.0	164	164	164	164	15.0	15.0	
12:33	12:44	13,005.0	0.00		16	25	0.0	544	2,983.0	0.0	191	191	191	191	0.0	0.0	
12:44	13:30	13,005.0	53.00	68.8	38	47	233.0	543	3,387.0	79.0	169	169	169	169	14.0	14.0	
13:31	13:43	13,058.0	0.00		3	34	0.0	645	3,446.0	0.0	207	207	207	207	0.0	0.0	
13:44	15:08	13,058.0	63.00	45.0	37	72	699.0	646	4,032.0	45.0	171	171	171	171	12.0	12.0	

BHA #6 , PRODUCTION - LATERAL

Bit Run	5	Drill Bit		8 1/2, TKC66-Q1, A295154	Bit Type	PDC	Make	REED
Nozzles (1/32")	13/13/13/13/13	Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull	Hours Drilled By Bit (hr)	Depth Drilled By Bit (ft)		
		0.78		-----				
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
410	DRILL PIPE	5	4.28	12,995.74	13,121.00	253,416.9	253	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	125.26		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	41.26	121.49		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 7/8	3.00	26.44	80.23		0	ARSENAL
1	DRILL COLLAR - PONY	7	3.00	9.65	53.79		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	5.82	44.14		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.29	38.32		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	26.03		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.35	10.40		0	GE/BAKER HUGHES

Mud Motors



SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend	
15918389		0		SEALED		6:7		10.6				0	
Sensors													
Sensor Type				Sensor-Bit (ft)				Note					
NEAR BIT INCLINOMETER				7.23									
GAMMA				13.40									
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)		
8.40	8.59	203.6		3.6	266.5	540.4	18.1	737.0	231.83	279.21	360.37		
Mud Checks													
Time		Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)		
2/25/2023 16:30		PIONEER DRILLING FLUIDS				OIL BASE	13,121.0	8.50	63		75.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)			
	10.000	6	7			8.4		250.0		500.0			
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
9.0		7.3											
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH	
30,000		3,200.000		0		75.8/24.2		719.0		3.9			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
10.000				16.000				19.000					
Comment													
CCI - NO PSI													
Mud Checks													
Time		Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)		
2/25/2023 08:00		PIONEER DRILLING FLUIDS				OIL BASE	12,694.0	8.40	61		112.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)			
	9.000	6	7			8.4		250.0		500.0			
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
9.0		7.3											
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH	
30,000		3,200.000		0		74.7/25.3		711.0		4.4			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
10.000				15.000				17.000					
Comment													
CCI - NO PSI													
Last BOP Test													
Date		Test Type	Item Tested				Next Test Date		Com				
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00				3/15/2023 08:30		Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests													
Test Type							Depth (ftKB)		Dens Fluid (lb/gal)				
FORMATION INTEGRITY							1,957.0		12.96				
FORMATION INTEGRITY							7,020.0		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, 1,950.0ftKB			No	30.00		1,000.0	
CASING	STANDARD	2/22/2023 13:30				INTERMEDIATE, 6,997.0ftKB			No	30.00		2,500.0	
Kick Offs & Key Depths													
Date				Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)				
2/23/2023 11:00				KICK OFF		8,444.0			8,276.5				
2/24/2023 06:00				HEEL		9,466.0			8,929.4				
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		1,950.0		1,949.5		13 3/8	J55	54.50	BTC		1,317.7		
INTERMEDIATE		6,997.0		6,852.9		9 5/8	P110	40.00	BTC		3,392.3		
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	7519	6241		Mud Diesel (Ticket #57422)			14,447		45607		
DIESEL	FUEL	GAL	7500	2163		Rig Fuel (Ticket #)			10,929		26653		
DIESEL	FUEL AUXILIARY	GAL	0	0		Spare Rig Diesel Tank (Winter)			19,616		0		
Mud Additive Amounts													
Des				Type			Units	Rec	Consumed	On Loc		Cum Cons	
DRILLING FLUID TECH				SUPERVISION			EA	1	1	0.0		14	
PMDHYPDF-A200				SHAKER SCREEN			EA		2	10.0		7	
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL			TON		4	29.11		53	
DD WET				WETTING AGENT			GAL		5	540.0		10	
SOLTEX				FILTRATE CONTROL			LB SACK		10	75.0		20	
DD TONE				ORGANOPHILLIC CLAY			LB SACK		23	127.0		68	

CALCIUM CHLORIDE			CALCIUM CHLORIDE		LB SACK		35	205.0	203
LIME			ALKALINITY CONTROL		LB SACK		50	250.0	233
DD LEM			LOW END MODIFIER		GAL		145	680.0	355
DDF MUL			ALL IN ONE EMULSIFIER		GAL		155	1,260.0	430
TECH SERVICE SUPPORT			SUPERVISION		EA	350	350	0.0	3,500
DIESEL - FOR MUD			OIL MUD ADDITIVE		GAL	7519	6241	27,277.0	19,275
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				
11/7/2022 09:45		AS DRILL SURVEY			ODR, 11/4/2022 09:30				
Survey Data - All surveys for 24 hr reporting period									
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)		DLS (°/100ft)	
12,553.00	89.83	164.83	8,931.44	3,780.91	-3,333.83	2,246.53		2.01	
12,648.00	90.01	162.92	8,931.57	3,875.85	-3,425.08	2,272.91		2.02	
12,743.00	89.73	167.54	8,931.79	3,970.82	-3,516.92	2,297.12		4.87	
12,838.00	89.86	163.32	8,932.13	4,065.79	-3,608.84	2,321.02		4.44	
12,933.00	89.76	164.28	8,932.44	4,160.73	-3,700.07	2,347.52		1.02	
13,028.00	90.04	166.28	8,932.61	4,255.72	-3,791.95	2,371.66		2.13	
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)	
268_5_SPBY_L_A1		-5,984.0			8,974.0				
268_5_SPBY_L_A2		-6,033.0			9,023.0				
268_5_SPBY_L_A3		-6,117.0			9,107.0				
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,262.0				
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,311.0				
269_0_DEAN		-6,639.0			9,629.0				
304_0_STRAWN		-8,065.0			11,055.0				
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			
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			
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@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									3
MID CONTINENT WELL LOGGING SERVICE INC									3
STALLION SOLIDS CONTROL INC									1

H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	575.00
Days Since RI:	575.00

## Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	02/27/2023
Report #:	14
DFS:	13
AFE #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$86,716.92

API/UWI 42-003-48492-0000			Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00036584		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022		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		11/4/2022 09:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype			Date		Note								
MILESTONE		ESTIMATED PAD RELEASE			3/10/2023		Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.								
Daily Operations															
Footage/Meterage (ft) 1,644.00			Drilling Hours 15.28		% Rotating Time 100.00		End Depth (ftKB) 14,765.0		Target Depth (ftKB) 24,337.0		Daily Field Est Total \$86,716.92		Cum Field Est To Date \$2,427,536.91		
24 HR ROP (ft/hr) 107.6		Circulating Hours 0.63		% Sliding Time 0.00		End Depth (TVD) (ftKB) 8,939.0		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$2,795.60		Cum Mud Field Est \$110,741.81		Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,000.0				Daily Goal - Next 24 2,500.0				Goal Comments Goal Met			
Backbuild Yes		Lateral Inclination Toe Flat		Last Casing String INTERMEDIATE, 6,997.0ftKB						Next Casing String PRODUCTION, 24,327.0ftKB					
Avg Connection Gas 325.00			Avg Trip Gas 0.00		Avg Background Gas 321.00			Max Connection Gas 434.00			Max Trip Gas 0.00		Max Drill Gas 487.00		
Operations Summary TIH, Drill Prod Lat. w/RSS T/14,195', Circ for 1.5 hrs due to high winds, Drill Prod Lat. w/RSS T/14,765'. SD: 14,646', Inc: 90.51°, Amz:165.58°, Avg DLS: 1.36°, Above:1', Right:6'															
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS per Baker plan.															
Operations At Report Time Drilling 8.5" Production Lateral w/RSS @ 14,765'.															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 36% Complete  Savor Sub:8,392' Daily NPT:7 H&P:0 3rd Party:25.75 Pioneer: 14.75															
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		3	09:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/9,000 T/13,058'. with proper displacemnet.			13,121.0		13,121.0		3.00	5
09:00		0.5	09:30	PROD, DRL LAT	CIRC	NORMAL	Downlink to MWD			13,121.0		13,121.0		0.50	5
09:30		5.5	15:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/13,121' T/13,628' (507' @ 92 fph), WOB:45, GPM:600, SPP:3,000, Diff:800, RPM:80, TQ:15K, with full returns. (Drilling while trouble shoot Dir. tool surveys)			13,121.0		13,628.0			
15:00		5.25	20:15	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/13,628' T/14,195' (567' @ 108 fph), WOB:45, GPM:600, SPP:3,000, Diff:800, RPM:80, TQ:15K, with full returns.			13,628.0		14,195.0			
20:15		1.5	21:45	PROD, DRL LAT	WOW	NORMAL	Circulate & work string due to weather (High Winds)			14,195.0		14,195.0		1.50	7
21:45		6.25	04:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/14,195' T/14,671' (476' @ 76 fph), WOB:40, GPM:640, SPP:3,600, Diff:700, RPM:80, TQ:15K, with full returns.			14,195.0		14,671.0			
04:00		2	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/14,671' T/14,765' (94' @ 47 fph), WOB:30-40, GPM:550-640, SPP:3,600, Diff:700, RPM:80, TQ:15K, with full returns.			14,671.0		14,765.0			

						(Drilling while trouble shoot Dir. tool shock & vibe) SD: 14,646', Inc: 90.51°, Amz:165.58°, Avg DLS: 1.36°, Above:1', Right:6'											
Interval Problems																	
DIRECTIONAL, 13,170.0ftKB, 2/25/2023 15:00																	
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment										
5	18.50	No	ROTARY STEERABLE	FAILURE - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Heavy shock and vibe at the tool. Unable to stabilize Inc & Az, PR dropped off, TOH for BHA, bit damaged on shoulder cutters worn down to matrix, motor could not be drained seemed to be locked up.										
DIRECTIONAL, 13,628.0ftKB, 2/26/2023 09:30																	
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment										
6	5.50	Yes	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Trouble shooting survey tool. Filter through each pump to find the right gpm to get survey. Drilling with diminished capacity.										
SURFACE CONDITION, 14,195.0ftKB, 2/26/2023 20:15																	
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment										
7	1.50	No	LOCATION	WEATHER	0.00	PIONEER NATURAL RESOURCES USA INC	Circulate & work string due to high winds.										
DIRECTIONAL, 14,671.0ftKB, 2/27/2023 04:00																	
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment										
8		Yes	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT	0.00	BAKER HUGHES OILFIELD OPERATIONS INC	Trouble RSS shock & vibe, lower WOB, change RPM, drop GPM from 640 to 550 & perform step test, Drilling with diminished capacity.										
Drill Strings																	
BHA #6 , PRODUCTION - LATERAL																	
Bit Run			Drill Bit			Bit Type		Make									
5			8 1/2, TKC66-Q1, A295154			PDC		REED									
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		-----		15.28		1,644.00								
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)								
15.28			1,644.00		107.6		13,121.0		14,765.0								
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
465	DRILL PIPE			5	4.28	14,639.74	14,765.00	285,474.9	285	RIG							
1	SUB - FILTER			6 3/4	2.25	3.77	125.26		0	GE/BAKER HUGHES							
1	MOTOR - STABILIZER SLEEVE			7	3.00	41.26	121.49		0	GE/BAKER HUGHES							
1	ANTI-STALL TOOL			6 7/8	3.00	26.44	80.23		0	ARSENAL							
1	DRILL COLLAR - PONY			7	3.00	9.65	53.79		0	GE/BAKER HUGHES							
1	STABILIZER			6 3/4	2.75	5.82	44.14		0	GE/BAKER HUGHES							
1	PULSAR SUB			7	4.83	12.29	38.32		0	GE/BAKER HUGHES							
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	15.63	26.03		0	GE/BAKER HUGHES							
1	RSS TOOL			7	4.33	9.35	10.40		0	GE/BAKER HUGHES							
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend						
15918389		0		SEALED		6:7		10.6			0						
Sensors																	
Sensor Type				Sensor-Bit (ft)				Note									
NEAR BIT INCLINOMETER				7.23													
GAMMA				13.40													
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 (°)
09:40	10:08	13,121.0	49.00	104.3	20	68	470.0	597	3,719.0	153.0	183	183	183	183	14.0	14.0	
10:50	11:37	13,170.0	92.00	117.9	26	80	421.0	573	3,534.0	158.0	179	179	179	179	14.0	14.0	
12:14	12:45	13,262.0	98.00	188.5	31	80	661.0	595	3,852.0	227.0	173	173	173	173	15.0	15.0	
13:08	13:37	13,360.0	91.00	189.6	37	86	592.0	602	3,955.0	204.0	168	168	168	168	15.0	15.0	
13:52	14:09	13,451.0	73.00	260.7	39	90	703.0	602	4,066.0	253.0	166	166	166	166	16.0	16.0	
14:25	16:53	13,524.0	382.00	154.7	32	89	519.0	599	3,893.0	165.0	171	171	171	171	14.0	14.0	
17:24	20:08	13,906.0	289.00	105.9	28	79	386.0	636	4,130.0	128.0	173	173	173	173	13.0	13.0	
20:12	20:50	14,195.0	0.00		3	25	0.0	637	3,660.0	0.0	203	203	203	203	0.0	0.0	
22:08	22:56	14,195.0	100.00	125.0	30	79	360.0	636	4,098.0	117.0	174	174	174	174	14.0	14.0	
23:10	04:48	14,295.0	434.00	77.1	35	77	444.0	636	4,181.0	82.0	167	167	167	167	14.0	14.0	
04:48	06:00	14,729.0	36.00	32.1	35	77	444.0	636	4,181.0	82.0	167	167	167	167	14.0	14.0	
Hydraulic Calculations																	
Dens Mud		ECD End	Bit Hydraulic Power		HP/Area	Jet Vel		Bit dP	Min Open Hole AV		Max Open Hole AV		Vol DrillString	Vol Bit to Shoe		Vol Shoe to Top	

(lb/gal)	(lb/gal)	(hp)	(hp/in²)	(ft/s)	(psi)	(ft/min)	(ft/min)	(bbl)	(bbl)	(bbl)
8.45	8.69	195.5	3.4	262.4	526.9	17.8	670.5	261.37	354.71	360.37
Mud Checks										
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)
2/26/2023 17:00		PIONEER DRILLING FLUIDS			OIL BASE	13,904.0	8.45	63		116.0
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	12.000	7	7		8.8		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	
9.0		7.3								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)
29,500		3,200.000		0		74.7/25.3		618.0		3.9
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)		
11.000				17.000				21.000		
Comment										
Mud Checks										
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)
2/26/2023 12:00		PIONEER DRILLING FLUIDS			OIL BASE	13,261.0	8.50	61		114.0
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	10.000	6	7		8.8		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	
9.0		7.3								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)
30,000		3,200.000		0		74.2/25.8		604.0		3.6
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)		
10.000				16.000				18.000		
Comment										
Last BOP Test										
Date		Test Type	Item Tested			Next Test Date		Com		
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00			3/15/2023 08:30		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests										
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)		
FORMATION INTEGRITY					1,957.0			12.96		
FORMATION INTEGRITY					7,020.0			9.50		
Casing Pressure Test										
Test Type	Test Subtype		Date			Item Tested			Failed?	Time (min)
CASING	STANDARD		11/8/2022 11:00			SURFACE, 1,950.0ftKB			No	30.00
CASING	STANDARD		2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB			No	30.00
Kick Offs & Key Depths										
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)		
2/23/2023 11:00			KICK OFF		8,444.0			8,276.5		
2/24/2023 06:00			HEEL		9,466.0			8,929.4		
Casing Strings										
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread
CONDUCTOR		106.0		106.0		20	H40	78.67		
SURFACE		1,950.0		1,949.5		13 3/8	J55	54.50		BTC
INTERMEDIATE		6,997.0		6,852.9		9 5/8	P110	40.00		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	2835		Rig Fuel		8,109	29488
DIESEL	MUD		GAL	7492	3445		Mud Diesel (Ticket #57558)		18,494	49052
DIESEL	FUEL AUXILIARY		GAL	0	0		Spare Rig Diesel Tank (Winter)		19,616	0
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		10	117.0	78
CALCIUM CHLORIDE			CALCIUM CHLORIDE			LB SACK		21	184.0	224
LIME			ALKALINITY CONTROL			LB SACK		50	200.0	283
TECH SERVICE SUPPORT			SUPERVISION			EA	350	350	0.0	3,850
DIESEL - FOR MUD			OIL MUD ADDITIVE			GAL		3445	23,832.0	22,720
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	14,671.0		2/27/2023 04:00		790.0	40		129		95
1	14,671.0		2/27/2023 04:00		845.0	50		161		95
1	14,671.0		2/27/2023 04:00		650.0	30		97		95

2	14,671.0	2/27/2023 04:00	725.0	40	129	95
2	14,671.0	2/27/2023 04:00	630.0	30	97	95
2	14,671.0	2/27/2023 04:00	850.0	50	161	95

Deviation Surveys

Date	Description	Job
11/7/2022 09:45	AS DRILL SURVEY	ODR, 11/4/2022 09:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
13,127.00	90.48	164.96	8,932.16	4,354.71	-3,887.84	2,396.24	1.41
13,222.00	89.56	164.96	8,932.13	4,449.70	-3,979.59	2,420.90	0.97
13,317.00	89.80	166.36	8,932.66	4,544.69	-4,071.62	2,444.42	1.50
13,413.00	88.48	166.29	8,934.10	4,640.68	-4,164.89	2,467.12	1.38
13,508.00	89.34	166.39	8,935.91	4,735.66	-4,257.18	2,489.55	0.91
13,603.00	89.65	167.20	8,936.74	4,830.64	-4,349.67	2,511.25	0.91
13,698.00	90.05	166.53	8,936.99	4,925.62	-4,442.18	2,532.84	0.82
13,793.00	90.14	166.63	8,936.83	5,020.62	-4,534.59	2,554.88	0.14
13,888.00	90.42	166.75	8,936.37	5,115.61	-4,627.03	2,576.76	0.32
13,983.00	90.14	163.01	8,935.91	5,210.57	-4,718.73	2,601.53	3.95
14,078.00	89.87	164.99	8,935.90	5,305.52	-4,810.04	2,627.71	2.10
14,173.00	89.59	167.81	8,936.35	5,400.50	-4,902.37	2,650.05	2.98
14,268.00	89.25	167.63	8,937.31	5,495.45	-4,995.19	2,670.26	0.40
14,362.00	88.85	167.00	8,938.87	5,589.41	-5,086.88	2,690.89	0.79
14,456.00	89.56	167.91	8,940.17	5,683.36	-5,178.63	2,711.31	1.23
14,551.00	90.05	166.84	8,940.49	5,778.33	-5,271.33	2,732.07	1.24
14,646.00	90.51	165.58	8,940.03	5,873.32	-5,363.59	2,754.72	1.41

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)
268_5_SPBY_L_A1	-5,984.0		8,974.0		
268_5_SPBY_L_A2	-6,033.0		9,023.0		
268_5_SPBY_L_A3	-6,117.0		9,107.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,311.0		
269_0_DEAN	-6,639.0		9,629.0		
304_0_STRAWN	-8,065.0		11,055.0		

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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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	3
MID CONTINENT WELL LOGGING SERVICE INC	3
STALLION SOLIDS CONTROL INC	1



H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	576.00
Days Since RI:	576.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	02/28/2023
Report #:	15
DFS:	14
AFE #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$55,987.91

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/8/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 115.00		Drilling Hours 2.98	% Rotating Time 100.00		End Depth (ftKB) 14,880.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$55,987.91		Cum Field Est To Date \$2,489,823.45	
24 HR ROP (ft/hr) 38.6	Circulating Hours 0.49	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,937.8		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$7,381.51		Cum Mud Field Est \$118,123.32	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,500.0			Daily Goal - Next 24 2,500.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,327.0ftKB					
Avg Connection Gas 317.00		Avg Trip Gas 121.00		Avg Background Gas 332.00		Max Connection Gas 389.00		Max Trip Gas 249.00		Max Drill Gas 432.00	
Operations Summary Drill Prod Lat. w/RSS T/14,765', Circ, TOH due to PR, change BHA, TIH T/14,665', W&R T/14,880'. SD: 14,835', Inc: 90.94°, Amz:165.07°, Avg DLS: 1.36°, Above:3', Right:3'											
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS per Baker plan.											
Operations At Report Time TIH with 8.5" Prod Lateral RSS BHA @ 14,880'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 37% Complete  Savor Sub:8,507' Daily NPT:21 H&P:0 3rd Party:46.75 Pioneer: 14.75											
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	3	09:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/14,765' T/14,880' (115' @ 38 fph), WOB:30-40, GPM:550-640, SPP:3,600, Diff:700, RPM:80, TQ:15K, with full returns. (Drilling while trouble shoot Dir. tool shock & vibe). SD: 14,835', Inc: 90.94°, Amz:165.07°, Avg DLS: 1.36°, Above:3', Right:3'		14,765.0	14,880.0		
09:00	2	11:00	PROD, DRL LAT	CIRC	NORMAL	Circulate prior to TOH for BHA.		14,880.0	14,880.0	2.00	9
11:00	0.5	11:30	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH pull 5 stds wet, F/14,880' T/14,474', hole taking proper fill.		14,880.0	14,880.0	0.50	9
11:30	0.25	11:45	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow check, well static.		14,880.0	14,880.0	0.25	9
11:45	5	16:45	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/14,474' T/6,997', hole taking proper fill. (Change breaks on DP & HWDP)		14,880.0	14,880.0	5.00	9
16:45	0.5	17:15	PROD, DRL LAT	HDL_ROTHTD	NORMAL	Pull Rot head & install trip nipple.		14,880.0	14,880.0	0.50	9
17:15	3	20:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/6,997' T/BHA, hole taking proper fill.		14,880.0	14,880.0	3.00	9
20:15	0.25	20:30	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on LD BHA.		14,880.0	14,880.0	0.25	9
20:30	0.25	20:45	PROD, DRL LAT	LD_DIR	NORMAL	L/D BHA**(BHA #5)**. Function rams.		14,880.0	14,880.0	0.25	9
20:45	0.25	21:00	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on PU BHA.		14,880.0	14,880.0	0.25	9

21:00	0.5	21:30	PROD, DRL LAT	PU_ DIR	NORMAL	Pick up Baker RSS BHA #7 Bit:8.5" Halliburton HD65K RSS AutoTrak	14,880.0	14,880.0	0.50	9
21:30	1.5	23:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/BHA T/3,000' with proper displacemnet.	14,880.0	14,880.0	1.50	9
23:00	0.25	23:15	PROD, DRL LAT	CIRC	NORMAL	Test Dir tools, MWD & run dianostics on RSS.	14,880.0	14,880.0	0.25	9
23:15	1.75	01:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/3,000 T/6,997', with proper displacemnet.	14,880.0	14,880.0	1.75	9
01:00	0.5	01:30	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Remove trip nipple & install Rot head.	14,880.0	14,880.0	0.50	9
01:30	3.75	05:15	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/6,997 T/14,665', with proper displacemnet.	14,880.0	14,880.0	3.75	9
05:15	0.75	06:00	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash & ream last 2 stds to btm F/14,665' T/14,880', downlink to RSS.	14,880.0	14,880.0	0.75	9

Interval Problems

DIRECTIONAL, 14,671.0ftKB, 2/27/2023 04:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
8	5.00	Yes	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT	0.00	BAKER HUGHES OILFIELD OPERATIONS INC	Trouble RSS shock & vibe, lower WOB, change RPM, drop GPM from 640 to 550 & perform step test, Drilling with diminished capacity.

DIRECTIONAL, 14,880.0ftKB, 2/27/2023 09:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
9	21.00	No	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Unable to drill due to high shock and vibe, and low P rate. TOH to inspect BHA, bit damaged on shoulder.

Drill Strings

BHA #6 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, TKC66-Q1, A295154		PDC	REED
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	2-7-WT-S-X-1-CT-PR	18.26	1,759.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
18.26	1,759.00	96.3	13,121.0	14,880.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
469	DRILL PIPE	5	4.28	14,754.74	14,880.00	287,717.4	288	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	125.26		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.00	41.26	121.49		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 7/8	3.00	26.44	80.23		0	ARSENAL
1	DRILL COLLAR - PONY	7	3.00	9.65	53.79		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	5.82	44.14		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.29	38.32		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	26.03		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.35	10.40		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15918389	0	SEALED	6:7	10.6		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	7.23	
GAMMA	13.40	

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	09:07	14,765.0	115.00	38.6	36	48	332.0	529	3,252.0	54.0	174	174	174	174	14.0	14.0	
09:37	09:38	14,880.0	0.00		44	80	0.0	591	3,818.0	53.0	166	166	166	166	0.0	0.0	
09:50	10:18	14,880.0	0.00		4	58	0.0	592	3,337.0	0.0	208	208	208	208	0.0	0.0	

BHA #7 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
6	8 1/2, HD65K, 13878787		PDC	HALLIBURTON
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)	Depth Drilled By Bit (ft)
13/13/13/13/13/12	0.76	-----		
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
469	DRILL PIPE	5	4.28	14,760.83	14,880.00	287,836.2	288	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	119.17		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	1.50	35.24	115.40		0	RIVAL DOWNHOLE TOOLS
1	ANTI-STALL TOOL	6 7/8	3.00	26.44	80.16		0	ARSENAL
1	DRILL COLLAR - PONY	7	3.00	9.65	53.72		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	5.82	44.07		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.29	38.25		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.96		0	GE/BAKER HUGHES

1	RSS TOOL			7	4.33		9.35		10.33			0	GE/BAKER HUGHES
Mud Motors													
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend	
RVEN7088		0		SEALED		7:8		5.7				0	
Sensors													
Sensor Type			Sensor-Bit (ft)				Note						
NEAR BIT INCLINOMETER			7.13										
GAMMA			13.08										
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	8.69	158.6		2.8	244.2	459.2	16.6	624.1	263.42	359.99	360.37		
Mud Checks													
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)			
2/27/2023 14:00		PIONEER DRILLING FLUIDS			OIL BASE	14,880.0	8.45	61		71.0			
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)				
	10.000	7	7		8.0		250.0		500.0				
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
9.0		7.3											
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH	
29,500		3,200.000		0		75.3/24.7		655.0		3.5			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
10.000				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)			
2/27/2023 09:00		PIONEER DRILLING FLUIDS			OIL BASE	14,880.0	8.50	64		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	7	7		8.0		250.0		500.0				
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
9.0		7.3											
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH	
30,000		3,200.000		0		74.7/25.3		688.0		3.9			
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
11.000				16.000				19.000					
Comment													
CCI - NO PSI													
Last BOP Test													
Date		Test Type	Item Tested				Next Test Date		Com				
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00				3/15/2023 08:30		Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests													
Test Type						Depth (ftKB)			Dens Fluid (lb/gal)				
FORMATION INTEGRITY						1,957.0			12.96				
FORMATION INTEGRITY						7,020.0			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, 1,950.0ftKB			No	30.00		1,000.0		
CASING	STANDARD	2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB			No	30.00		2,500.0		
Kick Offs & Key Depths													
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)					
2/23/2023 11:00			KICK OFF		8,444.0			8,276.5					
2/24/2023 06:00			HEEL		9,466.0			8,929.4					
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	1,950.0		1,949.5		13 3/8	J55	54.50	BTC	1,317.7				
INTERMEDIATE	6,997.0		6,852.9		9 5/8	P110	40.00	BTC	3,392.3				
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	4047		Mud Diesel			14,447	53099			
DIESEL	FUEL AUXILIARY	GAL	0	0		Spare Rig Diesel Tank (Winter)			19,616	0			
DIESEL	FUEL	GAL	0	1941		Rig Fuel			6,168	31429			
Mud Additive Amounts													
Des			Type			Units	Rec	Consumed	On Loc	Cum Cons			
DRILLING FLUID TECH			SUPERVISION			EA	1	1	0.0	16			
PMDHYPDF-A200			SHAKER SCREEN			EA	24	3	31.0	10			
BULK TANK BLOWERS			MISCELLANEOUS			PER DAY	3	3	0.0	13			
XMP GILSONITE			FILTRATE CONTROL			LB SACK		5	30.0	30			

LIME	ALKALINITY CONTROL	LB SACK		8	192.0	291	
BULK BARITE - BARIUM SULFATE	WEIGHTING MATERIAL	TON	19.52	10	38.63	63	
DD WET	WETTING AGENT	GAL		10	530.0	20	
CALCIUM CHLORIDE	CALCIUM CHLORIDE	LB SACK		14	170.0	238	
DD LEM	LOW END MODIFIER	GAL		70	610.0	425	
DDF MUL	ALL IN ONE EMULSIFIER	GAL		120	1,140.0	550	
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	4,200	
DIESEL - FOR MUD	OIL MUD ADDITIVE	GAL	7492	4047	27,277.0	26,767	
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			
11/7/2022 09:45		AS DRILL SURVEY		ODR, 11/4/2022 09:30			
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
14,835.00	90.94	165.07	8,938.50	6,062.30	-5,546.40	2,802.67	0.81
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)
268_5_SPBY_L_A1		-5,984.0			8,974.0		
268_5_SPBY_L_A2		-6,033.0			9,023.0		
268_5_SPBY_L_A3		-6,117.0			9,107.0		
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,311.0		
269_0_DEAN		-6,639.0			9,629.0		
304_0_STRAWN		-8,065.0			11,055.0		
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	
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	
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@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							3
MID CONTINENT WELL LOGGING SERVICE INC							3
STALLION SOLIDS CONTROL INC							1

H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	577.00
Days Since RI:	577.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	03/01/2023
Report #:	16
DFS:	15
AFE #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$89,619.94

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00	Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type	Subtype		Date	Note						
MILESTONE	ESTIMATED PAD RELEASE		3/9/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.						
Daily Operations										
Footage/Meterage (ft) 731.00		Drilling Hours 10.03	% Rotating Time 100.00	End Depth (ftKB) 15,611.0	Target Depth (ftKB) 24,337.0	Daily Field Est Total \$89,619.94		Cum Field Est To Date \$2,596,946.59		
24 HR ROP (ft/hr) 72.9	Circulating Hours 0.36	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,940.7	Target Depth Depth (TVD) (ftKB) 8,888.5	Daily Mud Field Est Total \$3,914.66		Cum Mud Field Est \$122,037.98	Total AFE + Sup \$3,912,010.11		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,500.0		Daily Goal - Next 24 777.0			Goal Comments Goal not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,327.0ftKB				
Avg Connection Gas 358.00		Avg Trip Gas 124.00	Avg Background Gas 474.00		Max Connection Gas 597.00		Max Trip Gas 597.00	Max Drill Gas 565.00		
Operations Summary Drill Prod Lat. w/RSS T/15,553', Trouble shoot Diff psi loss, TOH, change BHA, TIH T/6,923', slip & cut, TIH T/15,328' W&R T/15,553', Drill Prod Lat. w/RSS T/15,611' SD: 15,484', Inc: 90.56°, Amz:168.02°, Avg DLS: 1.34°, Above:2', Right:20'										
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS per Baker plan.										
Operations At Report Time Drilling 8.5" Production Lateral w/RSS @ 15,611'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 41% Complete  Savor Sub:9,238' Daily NPT:18.5 H&P:0 3rd Party:65.25 Pioneer: 14.75										
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	5	11:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/14,880' T/15,553' (673' @ 135 fph), WOB:30-40, GPM:550-640, SPP:3,600, Diff:700, RPM:80, TQ:15K, with full returns.	14,880.0	15,553.0		
11:00	0.75	11:45	PROD, DRL LAT	CIRC	NORMAL	Lost differential pressure. Tool is still communicationg with surface. Off bottom pressure is good.	15,553.0	15,553.0	0.75	10
11:45	0.5	12:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH pull 5 stds wet, F/14,880' T/14,474', hole taking proper fill.	15,553.0	15,553.0	0.50	10
12:15	0.25	12:30	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow check, well static.	15,553.0	15,553.0	0.25	10
12:30	3	15:30	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/14,474' T/6,923', hole taking proper fill. (Change breaks on DP & HWDP)	15,553.0	15,553.0	3.00	10
15:30	0.25	15:45	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Pull Rot head & install trip nipple.	15,553.0	15,553.0	0.25	10
15:45	3	18:45	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/6,923' T/BHA, hole taking proper fill.	15,553.0	15,553.0	3.00	10
18:45	0.25	19:00	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on LD BHA.	15,553.0	15,553.0	0.25	10
19:00	0.25	19:15	PROD, DRL LAT	LD_DIR	NORMAL	L/D BHA**(BHA #7)**. Function rams. Bit green no damage, LD Mtr & NeoTork	15,553.0	15,553.0	0.25	10

19:15	0.25	19:30	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on PU BHA.	15,553.0	15,553.0	0.25	10
19:30	0.25	19:45	PROD, DRL LAT	PU_ DIR	NORMAL	P/U BHA**(BHA #8)**.	15,553.0	15,553.0	0.25	10
19:45	0.5	20:15	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection.	15,553.0	15,553.0	0.50	10
20:15	3.25	23:30	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/BHA T/6,997' with proper displacemnet.	15,553.0	15,553.0	3.25	10
23:30	0.5	00:00	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Remove trip nipple & install Rot head.	15,553.0	15,553.0	0.50	10
00:00	0.25	00:15	PROD, DRL LAT	CIRC	NORMAL	Test MWD & run RSS diagnostics.	15,553.0	15,553.0	0.25	10
00:15	0.75	01:00	PROD, DRL LAT	SLIP_CUT	NORMAL	Slip & cut.	15,553.0	15,553.0	0.75	10
01:00	3.5	04:30	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/6,997 T/15,328', with proper displacemnet.	15,553.0	15,553.0	3.50	10
04:30	1	05:30	PROD, DRL LAT	TIH_NONELEV	NORMAL	Fill pipe, break circ., W&R last 2 stds to btm F/15,328' T/15,553', downlink RSS.	15,553.0	15,553.0	1.00	10
05:30	0.5	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/15,553' T/15,611' (58' @ 116 fph), WOB:30-40, GPM:500, SPP:2,600, Diff:600, RPM:80, TQ:15K, with full returns. SD: 15,484', Inc: 90.56°, Amz:168.02°, Avg DLS: 1.34°, Above:2', Right:20'	15,553.0	15,611.0		

Interval Problems

DIRECTIONAL, 14,880.0ftKB, 2/27/2023 09:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
9	21.00	No	ROTARY STEERABLE	FAILURE - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Unable to drill due to high shock and vibe, and low P rate. TOH to inspect BHA, bit damaged on shoulder.

DIRECTIONAL, 15,553.0ftKB, 2/28/2023 11:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
10	18.50	No	MOTOR	DOWNHOLE EQUIPMENT	0.00	BAKER HUGHES OILFIELD OPERATIONS INC	While drilling lateral with new BHA drilled 673' and lost all Diff psi, off btm psi was good, trouble shoot, TOH for BHA, on surface Mtr drained, checked Mtr & NeoTork no signs of visual damage, drill bit did not have any damage, RR drill bit & changed Mtr & NeoTork.

Drill Strings

BHA #7 , PRODUCTION - LATERAL

Bit Run	Drill Bit	Bit Type	Make
6	8 1/2, HD65K, 13878787	PDC	HALLIBURTON
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)
13/13/13/13/13/12	0.76	0-0-NO-A-X-0-NO-DMF	5.03
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)
5.03	673.00	133.8	14,880.0
			Depth Out (ftKB)
			15,553.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
489	DRILL PIPE	5	4.28	15,433.83	15,553.00	300,959.7	301	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	119.17		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	1.50	35.24	115.40		0	RIVAL DOWNHOLE TOOLS
1	ANTI-STALL TOOL	6 7/8	3.00	26.44	80.16		0	ARSENAL
1	DRILL COLLAR - PONY	7	3.00	9.65	53.72		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	5.82	44.07		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.29	38.25		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.96		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.35	10.33		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
RVEN7088	0	SEALED	7:8	5.7		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	7.13	
GAMMA	13.08	

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	10:59	14,880.0	671.00	134.7	34	73	428.0	555	3,533.0	156.0	170	170	170	170	18.0	18.0	
11:04	11:15	15,551.0	0.00		0	25	0.0	599	3,020.0	0.0	209	209	209	209	0.0	0.0	
11:27	11:30	15,551.0	2.00	40.0	53	80	0.0	599	3,439.0	41.0	151	151	151	151	17.0	17.0	
11:47	11:58	15,553.0	0.00		0	0	0.0	393	1,722.0	0.0	238	238	238	238	0.0	0.0	

BHA #8 , PRODUCTION - LATERAL

Bit Run	Drill Bit	Bit Type	Make
6RR	8 1/2, HD65K, 13878787	PDC	HALLIBURTON
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)
13/13/13/13/13/12	0.76	-----	5.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)
5.00	58.00	11.6	15,553.0
			Depth Out (ftKB)
			15,611.0

Drill String Components



Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make												
492	DRILL PIPE		5	4.28	15,483.88	15,611.00	301,935.7	302	RIG												
1	SUB - FILTER		6 3/4	2.25	3.77	127.12		0	GE/BAKER HUGHES												
1	MOTOR - STABILIZER SLEEVE		7	1.88	43.19	123.35		0	GE/BAKER HUGHES												
1	ANTI-STALL TOOL		6 7/8	3.00	26.44	80.16		0	ARSENAL												
1	DRILL COLLAR - PONY		7	3.00	9.65	53.72		0	GE/BAKER HUGHES												
1	STABILIZER		6 3/4	2.75	5.82	44.07		0	GE/BAKER HUGHES												
1	PULSAR SUB		7	4.83	12.29	38.25		0	GE/BAKER HUGHES												
1	MWD TOOL - NON-RETRIEVABLE		7	3.25	15.63	25.96		0	GE/BAKER HUGHES												
1	RSS TOOL		7	4.33	9.35	10.33		0	GE/BAKER HUGHES												
Mud Motors																					
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend									
14969163		0		SEALED		7:8		6.4				0									
Sensors																					
Sensor Type			Sensor-Bit (ft)				Note														
NEAR BIT INCLINOMETER			7.13																		
GAMMA			13.08																		
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 (°)				
05:30	06:00	15,553.0	58.00	11.6	40	80	0.0	500	3,200.0	41.0	151	151	151	151	17.0	17.0					
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)	
8.40		8.59		99.3		1.7		211.5		340.3		14.0		527.1		276.15		393.50		360.37	
Mud Checks																					
Time			Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)					
2/28/2023 19:00			PIONEER DRILLING FLUIDS				OIL BASE		15,553.0		8.40		60			75.0					
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					9.2			250.0			500.0				
Solids (%)			Low Gravity Solids (%)					Sand (%)			MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)				
8.0			6.3																		
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
30,000			3,600.000			0			76.6/23.4			770.0			4.4						
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)									
10.000						14.000						16.000									
Comment																					
CCI - NO PSI																					
Mud Checks																					
Time			Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)					
2/28/2023 09:00			PIONEER DRILLING FLUIDS				OIL BASE		15,253.0		8.50		62			114.0					
pV (cP)		YP (lbf/100ft²)		Vis 3rpm		Vis 6rpm		Filtrate (mL/30min)			HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)				
		11.000		7		7					9.2			250.0			500.0				
Solids (%)			Low Gravity Solids (%)					Sand (%)			MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)				
8.5			6.9																		
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
29,000			3,200.000			0			76.5/23.5			761.0			4.0						
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)									
11.000						15.000						18.000									
Comment																					
CCI - NO PSI																					
Last BOP Test																					
Date			Test Type		Item Tested				Next Test Date			Com									
2/22/2023 08:30			BOP		BOP'S, 12/13/2022 20:00				3/15/2023 08:30			Test BOP 5000 High /250 LOW									
Leak Off and Formation Integrity Tests																					
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)									
FORMATION INTEGRITY								1,957.0				12.96									
FORMATION INTEGRITY								7,020.0				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, 1,950.0ftKB					No		30.00		1,000.0					
CASING		STANDARD		2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB					No		30.00		2,500.0					
Kick Offs & Key Depths																					
Date				Type			Top Depth (ftKB)				Depth Top (TVD) (ftKB)										
2/23/2023 11:00				KICK OFF			8,444.0				8,276.5										
2/24/2023 06:00				HEEL			9,466.0				8,929.4										
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		1,950.0			1,949.5			13 3/8		J55		54.50		BTC		1,317.7					
INTERMEDIATE		6,997.0			6,852.9			9 5/8		P110		40.00		BTC		3,392.3					
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	7495	1960		Mud Diesel (Ticket #57675)			19,982	55059		
DIESEL	FUEL AUXILIARY	GAL	0	4738		Spare Rig Diesel Tank (Winter) (Transferred 4,738 gals to Rig Tank)			14,878	4738		
DIESEL	FUEL	GAL	4738	2217		Rig Fuel (Transferred 4,738 gals from Spare Tank)			8,689	33646		
Mud Additive Amounts												
Des				Type		Units	Rec	Consumed	On Loc	Cum Cons		
DRILLING FLUID TECH				SUPERVISION		EA	1	1	0.0	17		
DD WET				WETTING AGENT		GAL		5	525.0	25		
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL		TON		6	32.63	69		
DD TONE				ORGANOPHILLIC CLAY		LB SACK		7	110.0	85		
CALCIUM CHLORIDE				CALCIUM CHLORIDE		LB SACK		18	152.0	256		
LIME				ALKALINITY CONTROL		LB SACK		22	170.0	313		
TECH SERVICE SUPPORT				SUPERVISION		EA	350	350	0.0	4,550		
DIESEL - FOR MUD				OIL MUD ADDITIVE		GAL	7495	1960	32,812.0	28,727		
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				
11/7/2022 09:45				AS DRILL SURVEY				ODR, 11/4/2022 09:30				
Survey Data - All surveys for 24 hr reporting period												
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)
14,924.00		89.95	166.83	8,937.81		6,151.30		-5,632.73		2,824.27		2.27
15,018.00		89.92	164.44	8,937.92		6,245.29		-5,723.78		2,847.59		2.54
15,106.00		90.10	164.81	8,937.90		6,333.27		-5,808.63		2,870.92		0.47
15,201.00		88.72	168.47	8,938.88		6,428.24		-5,901.04		2,892.87		4.12
15,295.00		89.24	172.87	8,940.55		6,521.87		-5,993.76		2,908.10		4.71
15,389.00		89.27	167.33	8,941.78		6,615.57		-6,086.31		2,924.26		5.89
15,484.00		90.56	168.02	8,941.92		6,710.52		-6,179.12		2,944.54		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)
268_5_SPBY_L_A1				-5,984.0				8,974.0				
268_5_SPBY_L_A2				-6,033.0				9,023.0				
268_5_SPBY_L_A3				-6,117.0				9,107.0				
268_6_SPBY_L_B1/JO MILL				-6,272.0				9,262.0				
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE				-6,321.0				9,311.0				
269_0_DEAN				-6,639.0				9,629.0				
304_0_STRAWN				-8,065.0				11,055.0				
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		
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		
JONES, JUSTIN, SUPERINTENDENT				SUPERINTENDENT		432-653-7035		325-998-0261		JUSTIN.JONES@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										3		
MID CONTINENT WELL LOGGING SERVICE INC										3		
STALLION SOLIDS CONTROL INC										1		

H & P 417

Accept:12/13/2022

Release:

Days Since LTI:578.00

Days Since RI:578.00

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/02/2023

Report #:17

DFS:16

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$111,139.77

Daily Drilling Report

API/UWI 42-003-48492-0000			Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/9/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 2,338.00		Drilling Hours 21.37	% Rotating Time 100.00		End Depth (ftKB) 17,949.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$111,139.77		Cum Field Est To Date \$2,708,006.36	
24 HR ROP (ft/hr) 109.4	Circulating Hours 1.02	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,935.2		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$5,511.91		Cum Mud Field Est \$127,549.89	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 777.0			Daily Goal - Next 24 2,500.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,327.0ftKB					
Avg Connection Gas 317.00		Avg Trip Gas 108.00		Avg Background Gas 279.00		Max Connection Gas 400.00		Max Trip Gas 265.00		Max Drill Gas 446.00	
Operations Summary Drill 8.5" Prod Lat. w/RSS per Baker plan F/15,611' - T/17,949 SD: 17,910', Inc: 88.04°, Amz:164.64°, Avg DLS: 2.02°, Above:5.97', Right:4.59'											
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS per Baker plan T/20,449'.											
Operations At Report Time Drilling 8.5" Production Lateral w/RSS @ 18,034'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 56% Complete  Savor Sub:11,661' Daily NPT:0.0 H&P:0 3rd Party:65.25 Pioneer: 14.75											
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	22	04:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/15,553' T/17,936.0' (2383" @ 108.3 fph), WOB:15-35, GPM:600 SPP:4250, Diff:525, RPM:70, TQ:19K, with full returns.		15,553.0	17,936.0		
04:00	0.5	04:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.		17,936.0	17,936.0		
04:30	0.25	04:45	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/17936' T/17,949' (13" @ 52 fph), WOB:15-35, GPM:600 SPP:4250, Diff:525, RPM:70, TQ:19K, with full returns. SD: 17,910', Inc: 88.04°, Amz:164.64°, Avg DLS: 2.02°, Above:5.97', Right:4.59'		17,936.0	17,949.0		
04:45	0.75	05:30	PROD, DRL LAT	3RD_PTY	NORMAL	Trouble shooting Stearing head values.		17,949.0	17,949.0	0.75	11
05:30	0.5	06:00	PROD, DRL LAT	3RD_PTY	NORMAL	Lost communication to the steering head on the RSS. (Circ for Trip)		17,949.0	17,979.0	0.50	11
Interval Problems											
DIRECTIONAL, ftKB, 3/2/2023 04:45											
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment		
				DIRECTIONAL			BAKER HUGHES OILFIELD		Lost communication to the		

11	No	CONTROL	EQUIPMENT		OPERATIONS INC	steering head											
Drill Strings																	
BHA #8 , PRODUCTION - LATERAL																	
Bit Run		Drill Bit				Bit Type		Make									
6RR		8 1/2, HD65K, 13878787				PDC		HALLIBURTON									
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull		Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)									
13/13/13/13/13/12		0.76		-----		26.37		2,349.00									
BHA Drilling Time (hr)		BHA Depth Drilled (ft)		BHA ROP (ft/hr)		Depth In (ftKB)		Depth Out (ftKB)									
26.37		2,349.00		89.1		15,600.0		17,949.0									
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	766.06	17,949.00	14,938.2	369	RIG								
24	HWDP		5	3.00	719.21	17,182.94	35,960.5	355									
519	DRILL PIPE		5	4.28	16,336.61	16,463.73	318,563.9	319	RIG								
1	SUB - FILTER		6 3/4	2.25	3.77	127.12		0	GE/BAKER HUGHES								
1	MOTOR - STABILIZER SLEEVE		7	1.88	43.19	123.35		0	GE/BAKER HUGHES								
1	ANTI-STALL TOOL		6 7/8	3.00	26.44	80.16		0	ARSENAL								
1	DRILL COLLAR - PONY		7	3.00	9.65	53.72		0	GE/BAKER HUGHES								
1	STABILIZER		6 3/4	2.75	5.82	44.07		0	GE/BAKER HUGHES								
1	PULSAR SUB		7	4.83	12.29	38.25		0	GE/BAKER HUGHES								
1	MWD TOOL - NON-RETRIEVABLE		7	3.25	15.63	25.96		0	GE/BAKER HUGHES								
1	RSS TOOL		7	4.33	9.35	10.33		0	GE/BAKER HUGHES								
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages									
14969163		0		SEALED		7:8		6.4									
Sensors																	
Sensor Type			Sensor-Bit (ft)				Note										
NEAR BIT INCLINOMETER			7.13														
GAMMA			13.08														
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	00:04	15,611.0	1,955.00	108.2	25	66	405.0	582	3,878.0	122.0	180	180	180	180	16.0	16.0	
00:40	03:19	17,566.0	325.00	122.6	25	67	420.0	595	4,117.0	130.0	186	186	186	186	19.0	19.0	
03:30	03:55	17,891.0	45.00	107.1	20	58	370.0	597	4,068.0	109.0	190	190	190	190	17.0	17.0	
04:42	04:56	17,936.0	13.00	56.5	11	59	0.0	597	3,655.0	55.0	203	203	203	203	14.0	14.0	
04:56	06:00	17,949.0	0.00		0	59	0.0	597	3,655.0		203	203	203	203	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)					
8.55	8.84	172.0		3.0	252.5	493.8	16.7		629.4	311.22	500.81	360.37					
Mud Checks																	
Time		Mud Company				Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)				
3/1/2023 17:20		PIONEER DRILLING FLUIDS				OIL BASE	16,960.0		8.55		60		117.0				
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			10.0		250.0		500.0							
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)					
9.5		7.9															
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH					
29,000		3,600.000		0		76.2/23.8		726.0		3.9							
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)									
10.000				15.000				17.000									
Comment																	
Mud Checks																	
Time		Mud Company				Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)				
3/1/2023 09:00		PIONEER DRILLING FLUIDS				OIL BASE	16,065.0		8.50		64		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	7			10.0		250.0		500.0							
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)					
9.5		7.8															
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH					
30,500		3,600.000		0		75.1/24.9		714.0		4.0							
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)									
11.000				17.000				19.000									
Comment																	
Last BOP Test																	
Date		Test Type	Item Tested				Next Test Date		Com								
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00				3/15/2023 08:30		Test BOP 5000 High /250 LOW								
Leak Off and Formation Integrity Tests																	
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)									
FORMATION INTEGRITY					1,957.0			12.96									

FORMATION INTEGRITY				7,020.0		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, 1,950.0ftKB		No	30.00	1,000.0	
CASING	STANDARD	2/22/2023 13:30		INTERMEDIATE, 6,997.0ftKB		No	30.00	2,500.0	
Kick Offs & Key Depths									
Date		Type		Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
2/23/2023 11:00		KICK OFF		8,444.0		8,276.5			
2/24/2023 06:00		HEEL		9,466.0		8,929.4			
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	1,950.0		1,949.5		13 3/8	J55	54.50	BTC	1,317.7
INTERMEDIATE	6,997.0		6,852.9		9 5/8	P110	40.00	BTC	3,392.3
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		3812		Mud Diesel	16,170	58871
Mud Additive Amounts									
Des		Type			Units	Rec	Consumed	On Loc	Cum Cons
TRUCKING		MISCELLANEOUS			EA	1	1	0.0	8
DRILLING FLUID TECH		SUPERVISION			EA	1	1	0.0	18
DD TONE		ORGANOPHILLIC CLAY			LB SACK		6	104.0	91
LIME		ALKALINITY CONTROL			LB SACK	200	35	335.0	348
CALCIUM CHLORIDE		CALCIUM CHLORIDE			LB SACK	168	38	282.0	294
DDF MUL		ALL IN ONE EMULSIFIER			GAL	275	65	1,350.0	615
DD LEM		LOW END MODIFIER			GAL	275	70	815.0	495
TECH SERVICE SUPPORT		SUPERVISION			EA	350	350	0.0	4,900
DIESEL - FOR MUD		OIL MUD ADDITIVE			GAL		3812	29,000.0	32,539
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			
11/7/2022 09:45			AS DRILL SURVEY			ODR, 11/4/2022 09:30			
Survey Data - All surveys for 24 hr reporting period									
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)		DLS (°/100ft)	
15,681.00	89.86	165.42	8,941.47	6,907.46	-6,371.15	2,988.40		2.20	
15,775.00	90.07	164.95	8,941.52	7,001.45	-6,462.03	3,012.44		0.55	
15,870.00	90.69	165.69	8,940.89	7,096.44	-6,553.92	3,036.51		1.02	
15,964.00	89.61	164.36	8,940.65	7,190.43	-6,644.73	3,060.80		1.82	
16,059.00	89.52	165.25	8,941.37	7,285.41	-6,736.40	3,085.70		0.94	
16,154.00	91.89	165.64	8,940.20	7,380.39	-6,828.34	3,109.57		2.53	
16,249.00	88.01	159.91	8,940.28	7,475.19	-6,919.02	3,137.68		7.28	
16,343.00	87.02	166.83	8,944.36	7,568.95	-7,008.95	3,164.54		7.43	
16,438.00	92.41	164.56	8,944.84	7,663.91	-7,100.97	3,188.01		6.16	
16,528.00	88.62	162.14	8,944.03	7,753.80	-7,187.17	3,213.79		5.00	
16,617.00	90.56	167.78	8,944.67	7,842.74	-7,273.08	3,236.87		6.70	
16,708.00	90.23	167.85	8,944.04	7,933.69	-7,362.02	3,256.08		0.37	
16,798.00	88.62	167.37	8,944.94	8,023.64	-7,449.92	3,275.39		1.87	
16,888.00	89.95	163.71	8,946.06	8,113.61	-7,537.05	3,297.85		4.33	
16,977.00	87.48	167.37	8,948.06	8,202.57	-7,623.18	3,320.07		4.96	
17,068.00	92.01	168.14	8,948.47	8,293.49	-7,712.09	3,339.36		5.05	
17,157.00	94.02	162.20	8,943.78	8,382.32	-7,797.96	3,362.10		7.04	
17,252.00	90.01	164.08	8,940.44	8,477.13	-7,888.80	3,389.62		4.66	
17,347.00	90.69	162.80	8,939.86	8,572.04	-7,979.86	3,416.70		1.53	
17,441.00	89.76	166.49	8,939.49	8,666.00	-8,070.48	3,441.59		4.05	
17,536.00	91.27	167.58	8,938.64	8,760.97	-8,163.05	3,462.90		1.96	
17,631.00	90.75	165.11	8,936.96	8,855.94	-8,255.35	3,485.32		2.66	
17,726.00	92.57	166.96	8,934.21	8,950.90	-8,347.49	3,508.23		2.73	
17,820.00	89.86	166.57	8,932.22	9,044.86	-8,438.97	3,529.75		2.91	
17,910.00	88.04	166.64	8,933.87	9,134.83	-8,526.50	3,550.59		2.02	
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)
268_5_SPBY_L_A1	-5,984.0		8,974.0		
268_5_SPBY_L_A2	-6,033.0		9,023.0		
268_5_SPBY_L_A3	-6,117.0		9,107.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,311.0		
269_0_DEAN	-6,639.0		9,629.0		
304_0_STRAWN	-8,065.0		11,055.0		
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	
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	
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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					3
MID CONTINENT WELL LOGGING SERVICE INC					3
STALLION SOLIDS CONTROL INC					1



H & P 417

Accept:12/13/2022

Release:

Days Since LTI:579.00

Days Since RI:579.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/03/2023

Report #:18

DFS:17

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$130,849.81

API/UWI 42-003-48492-0000			Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/9/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 2/22/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 0.00		Drilling Hours	% Rotating Time		End Depth (ftKB) 17,949.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$130,849.81		Cum Field Est To Date \$2,839,538.41	
24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB) 8,935.2		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$7,765.14		Cum Mud Field Est \$135,315.03	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 0.0			Daily Goal - Next 24 2,000.0			Goal Comments Goal Met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,327.0ftKB					
Avg Connection Gas 325.00		Avg Trip Gas 105.00		Avg Background Gas 250.00		Max Connection Gas 367.00		Max Trip Gas 148.00		Max Drill Gas 366.00	
Operations Summary Circ hole clean for trip, TOH T/ 7,968', (1.75 hrs NPT) Wait on weather (High winds), TOH T/BHA, L/D BHA,#8 M/U BHA #9 , (3 hrs NPT stablizer had 2 washes on face of two blades, Wait on new stablizer), TIH T8,500 SD: 17,910', Inc: 88.04°, Amz:164.64°, Avg DLS: 2.02°, Above:5.97', Right:4.59'											
Operations Next Report Period TIH F/ Drill 8.5" Prod Lat. w/RSS per Baker plan T/19,949'.											
Operations At Report Time TIH at 8,500'											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 56% Complete  Savor Sub:11,661' Daily NPT:24 H&P:0 3rd Party:89.25 Pioneer: 16.75											
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	3	09:00	PROD, DRL LAT	CIRC	NORMAL	CBU(2.5) prior to TOH for RSS failure.		17,949.0	17,949.0	3.00	11
09:00	0.5	09:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service.		17,949.0	17,949.0	0.50	11
09:30	5.75	15:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH F/17949' T/7,968'		17,949.0	17,949.0	5.75	11
15:15	1.75	17:00	PROD, DRL LAT	WOW	NORMAL	Circulate & work string due to weather (High Winds)		17,949.0	17,949.0	1.75	11, 12
17:00	3	20:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/7,968' T/BHA, hole taking proper fill.		17,949.0	17,949.0	3.00	11
20:00	0.25	20:15	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on LD BHA.		17,949.0	17,949.0	0.25	11
20:15	1	21:15	PROD, DRL LAT	LD_DIR	NORMAL	L/D BHA**(BHA #8)**. Function rams. LD NeoTork, Auto track, 8-3/8" stab had washes on the face two blades, Motor looked good rerun mud motor.		17,949.0	17,949.0	1.00	11
21:15	0.25	21:30	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on PU BHA.		17,949.0	17,949.0	0.25	11
21:30	0.75	22:15	PROD, DRL LAT	PU_DIR	NORMAL	P/U BHA**(BHA #9)**.		17,949.0	17,949.0	0.75	11
22:15	0.5	22:45	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection.		17,949.0	17,949.0	0.50	11
22:45	3	01:45	PROD, DRL LAT	3RD_PTY	NORMAL	Wait on stabilizer. Replaced grabber dies on top drive. Replaced ST-80 dies.		17,949.0	17,949.0	3.00	11, 13
01:45	0.25	02:00	PROD, DRL LAT	PU_DIR	NORMAL	Make up stabilizer.		17,949.0	17,949.0	0.25	11

02:00	1	03:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/BHA T/3,408' with proper displacemnet.	17,949.0	17,949.0	1.00	11
03:00	0.75	03:45	PROD, DRL LAT	CIRC	NORMAL	Test MWD & run RSS diagnostics.	17,949.0	17,949.0	0.75	11
03:45	1	04:45	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/3,408 T/6,997' with proper displacemnet.	17,949.0	17,949.0	1.00	11
04:45	0.5	05:15	PROD, DRL LAT	HDL_ROT HD	NORMAL	Remove trip nipple & install Rot head. Fill pipe	17,949.0	17,949.0	0.50	11
05:15	0.75	06:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/6,997 T/8,500' with proper displacemnet.	17,949.0	17,949.0	0.75	11
Interval Problems										
DIRECTIONAL, ftKB, 3/2/2023 04:45										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
11		No	DIRECTIONAL CONTROL	EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Lost communication to the steering head			
SURFACE CONDITION, 17,949.0ftKB, 3/2/2023 15:15										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
12	1.75	No	LOCATION	WEATHER		PIONEER NATURAL RESOURCES USA INC	Stop tripping due to weather (High Winds)			
DIRECTIONAL, 17,949.0ftKB, 3/2/2023 22:45										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
13	3.00	No	DIRECTIONAL CONTROL	EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Stablizer had washouts on face of two blades, Wait on new stablizer.			
Drill Strings										
BHA #8 , PRODUCTION - LATERAL										
Bit Run			Drill Bit			Bit Type		Make		
6RR			8 1/2, HD65K, 13878787			PDC		HALLIBURTON		
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull	Hours Drilled By Bit (hr)		Depth Drilled By Bit (ft)		
13/13/13/13/13/12			0.76		1-1-WT-A-X-0-NO-DMF	26.37		2,396.00		
BHA Drilling Time (hr)			BHA Depth Drilled (ft)		BHA ROP (ft/hr)	Depth In (ftKB)		Depth Out (ftKB)		
26.37			2,396.00		90.9	15,553.0		17,949.0		
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	766.06	17,949.00	14,938.2	369	RIG
24	HWDP			5	3.00	719.21	17,182.94	35,960.5	355	
519	DRILL PIPE			5	4.28	16,336.61	16,463.73	318,563.9	319	RIG
1	SUB - FILTER			6 3/4	2.25	3.77	127.12		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE			7	1.88	43.19	123.35		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL			6 7/8	3.00	26.44	80.16		0	ARSENAL
1	DRILL COLLAR - PONY			7	3.00	9.65	53.72		0	GE/BAKER HUGHES
1	STABILIZER			6 3/4	2.75	5.82	44.07		0	GE/BAKER HUGHES
1	PULSAR SUB			7	4.83	12.29	38.25		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	15.63	25.96		0	GE/BAKER HUGHES
1	RSS TOOL			7	4.33	9.35	10.33		0	GE/BAKER HUGHES
Mud Motors										
SN		Bend Angle	Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend
14969163		0	SEALED		7:8		6.4			0
Sensors										
Sensor Type			Sensor-Bit (ft)			Note				
NEAR BIT INCLINOMETER			7.13							
GAMMA			13.08							
BHA #9 , PRODUCTION - LATERAL										
Bit Run			Drill Bit			Bit Type		Make		
7			8 1/2, HD65K, 13878786			PDC		HALLIBURTON		
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		-----					
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	765.75	17,949.00	14,932.1	369	RIG
24	HWDP			5	3.00	719.21	17,183.25	35,960.5	355	RIG
519	DRILL PIPE			5	4.28	16,336.61	16,464.04	318,563.9	319	RIG
1	SUB - FILTER			6 3/4	2.25	3.77	127.43		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE			7	1.88	43.19	123.66		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL			6 7/8	3.00	26.51	80.47		0	ARSENAL
1	DRILL COLLAR - PONY			7	3.00	9.65	53.96		0	GE/BAKER HUGHES
1	STABILIZER			6 3/4	2.75	5.82	44.31		0	GE/BAKER HUGHES
1	PULSAR SUB			7	4.83	12.68	38.49		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	15.63	25.81		0	GE/BAKER HUGHES
1	RSS TOOL			7	4.33	9.22	10.18		0	GE/BAKER HUGHES
Mud Motors										
SN		Bend Angle	Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend
14969163		.25	SEALED		7:8		6.4			

Sensors										
Sensor Type		Sensor-Bit (ft)				Note				
NEAR BIT INCLINOMETER		6.89								
GAMMA		12.38								
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)
3/2/2023 15:00		PIONEER DRILLING FLUIDS			OIL BASE	17,949.0	8.50	57		65.0
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	10.000	6	7		9.2		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	
9.0		7.3								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)
30,000		3,600.000		0		76.9/23.1		733.0		4.0
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)			Gel 30 min (lb/100ft²)			
11.000				14.000			16.000			
Comment										
CCI - NO PSI										
Mud Checks										
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)
3/2/2023 09:00		PIONEER DRILLING FLUIDS			OIL BASE	17,949.0	8.50	58		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	7	7		9.2		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	
9.0		7.3								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)
30,000		3,600.000		0		76.4/23.6		741.0		4.3
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)			Gel 30 min (lb/100ft²)			
10.000				14.000			17.000			
Comment										
CCI - NO PSI										
Last BOP Test										
Date		Test Type	Item Tested			Next Test Date		Com		
2/22/2023 08:30		BOP	BOP'S, 12/13/2022 20:00			3/15/2023 08:30		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests										
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)		
FORMATION INTEGRITY					1,957.0			12.96		
FORMATION INTEGRITY					7,020.0			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, 1,950.0ftKB			No	30.00	1,000.0
CASING	STANDARD		2/22/2023 13:30		INTERMEDIATE, 6,997.0ftKB			No	30.00	2,500.0
Kick Offs & Key Depths										
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)		
2/23/2023 11:00			KICK OFF		8,444.0			8,276.5		
2/24/2023 06:00			HEEL		9,466.0			8,929.4		
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	1,950.0		1,949.5		13 3/8	J55	54.50	BTC	1,317.7	
INTERMEDIATE	6,997.0		6,852.9		9 5/8	P110	40.00	BTC	3,392.3	
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 AUXILIARY	GAL		0		Spare Rig Diesel Tank (Winter) (Transferred 4,738 gals to Rig Tank)			14,878	4738
DIESEL	FUEL	GAL	7504	2455		Rig Fuel (Ticket #57847)			11,798	38041
DIESEL	MUD	GAL		4963		Mud Diesel			11,207	63834
Mud Additive Amounts										
Des				Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH				SUPERVISION		EA	1	1	0.0	19
DD WET				WETTING AGENT		GAL		5	520.0	30
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL		TON		5	27.63	74
XMP GILSONITE				FILTRATE CONTROL		LB SACK		6	74.0	36
PMDHYPDF-A200				SHAKER SCREEN		EA		6	25.0	16
SOLTEX				FILTRATE CONTROL		LB SACK		6	69.0	26
DD TONE				ORGANOPHILIC CLAY		LB SACK		10	94.0	101
CALCIUM CHLORIDE				CALCIUM CHLORIDE		LB SACK		35	247.0	329
LIME				ALKALINITY CONTROL		LB SACK		35	300.0	383

DDF MUL	ALL IN ONE EMULSIFIER	GAL		90	1,260.0	705
DD LEM	LOW END MODIFIER	GAL		105	710.0	600
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	5,250
DIESEL - FOR MUD	OIL MUD ADDITIVE	GAL		4953	24,047.0	37,492
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		
11/7/2022 09:45	AS DRILL SURVEY			ODR, 11/4/2022 09:30		
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)
268_5_SPBY_L_A1	-5,984.0			8,974.0		
268_5_SPBY_L_A2	-6,033.0			9,023.0		
268_5_SPBY_L_A3	-6,117.0			9,107.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0			9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0			9,311.0		
269_0_DEAN	-6,639.0			9,629.0		
304_0_STRAWN	-8,065.0			11,055.0		
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	
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	
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@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						3
MID CONTINENT WELL LOGGING SERVICE INC						3
STALLION SOLIDS CONTROL INC						1

H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	580.00
Days Since RI:	580.00

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	03/04/2023
Report #:	19
DFS:	18
AFE #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$87,847.09

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584	Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type	Subtype		Date	Note						
MILESTONE	ESTIMATED PAD RELEASE		3/13/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 3/04/23)plus one C/O and run prod casing.						
Daily Operations										
Footage/Meterage (ft) 2,252.00		Drilling Hours 16.36	% Rotating Time 100.00	End Depth (ftKB) 20,201.0	Target Depth (ftKB) 24,337.0	Daily Field Est Total \$87,847.09		Cum Field Est To Date \$2,927,385.50		
24 HR ROP (ft/hr) 137.7	Circulating Hours 0.22	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,921.5	Target Depth Depth (TVD) (ftKB) 8,888.5	Daily Mud Field Est Total \$6,106.11		Cum Mud Field Est \$141,421.14	Total AFE + Sup \$3,912,010.11		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,000.0			Daily Goal - Next 24 2,500.0		Goal Comments Goal met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,327.0ftKB				
Avg Connection Gas 303.00		Avg Trip Gas 74.00	Avg Background Gas 272.00		Max Connection Gas 358.00		Max Trip Gas 209.00	Max Drill Gas 317.00		
Operations Summary TIH F/8,500' Drill 8.5" Prod Lat. w/RSS per Baker plan F/17,949 - T/20,201'. SD: 20,091', Inc: 90.84°, Amz:163.94°, Avg DLS: 0.61°, Above:0.54', Right:15.92'										
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS per Baker plan T/22,701'.										
Operations At Report Time Drilling 8.5" Production Lateral w/RSS @ 20,201'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 70% Complete  Savor Sub13,913:' Daily NPT:5.75 H&P:0 3rd Party:98.0 Pioneer: 16.75										
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, DRL LAT	TIH_ELEV	NORMAL	TIH F/8,500 T/17,560' with proper displacemnet.	17,949.0	17,949.0	4.50	11
10:30	1	11:30	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash down F/17,560' T/17,949'. Pump up survey at this time.	17,949.0	17,949.0	0.50	11
11:30	1.25	12:45	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/17,949' T/18,044' (95' @ 76 fph), WOB:15-35, GPM:600 SPP:4250, Diff:525, RPM:70, TQ:19K, with full returns.	17,949.0	18,044.0		
12:45	0.75	13:30	PROD, DRL LAT	CIRC	NORMAL	Trouble shoot MWD.	18,044.0	18,044.0	0.75	14
13:30	14.5	04:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/18,044' T/20,019' (1,975' @136.2 fph), WOB:30-35, GPM:600 SPP:4,725, Diff:625, RPM:70, TQ:22K, with full returns.	18,044.0	20,019.0		
04:00	0.5	04:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.	20,019.0	20,019.0		
04:30	1.5	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/20,019' T/20,201' (182'@121.3fph), WOB:30-35, GPM:600 SPP:4,725, Diff:625, RPM:70, TQ:22K, with full returns. SD: 20,091', Inc: 90.84°, Amz:163.94°, Avg DLS: 0.61°, Above:0.54', Right:15.92'	20,019.0	20,201.0		
Interval Problems										

DIRECTIONAL, 17,949.0ftKB, 3/2/2023 04:45																					
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description				Est Cost OR (Cost)	Accountable Party			Comment									
11	30.25	No	DIRECTIONAL CONTROL	EQUIPMENT					BAKER HUGHES OILFIELD OPERATIONS INC			Lost communication to the steering head									
DIRECTIONAL, 18,044.0ftKB, 3/3/2023 12:45																					
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description				Est Cost OR (Cost)	Accountable Party			Comment									
14	0.75	No	MWD / LWD	TROUBLESHOOTING - DOWNHOLE EQUIPMENT					BAKER HUGHES OILFIELD OPERATIONS INC			Re- Calibrate MWD and adjust filters due to noise									
Drill Strings																					
BHA #9 , PRODUCTION - LATERAL																					
Bit Run			Drill Bit					Bit Type			Make										
7			8 1/2, HD65K, 13878786					PDC			HALLIBURTON										
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			-----			16.36			2,252.00									
BHA Drilling Time (hr)			BHA Depth Drilled (ft)			BHA ROP (ft/hr)			Depth In (ftKB)			Depth Out (ftKB)									
16.36			2,252.00			137.7			17,949.0			20,201.0									
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	3,017.75	20,201.00	58,846.1	413		RIG										
24	HWDP			5	3.00	719.21	17,183.25	35,960.5	355		RIG										
519	DRILL PIPE			5	4.28	16,336.61	16,464.04	318,563.9	319		RIG										
1	SUB - FILTER			6 3/4	2.25	3.77	127.43		0		GE/BAKER HUGHES										
1	MOTOR - STABILIZER SLEEVE			7	1.88	43.19	123.66		0		GE/BAKER HUGHES										
1	ANTI-STALL TOOL			6 7/8	3.00	26.51	80.47		0		ARSENAL										
1	DRILL COLLAR - PONY			7	3.00	9.65	53.96		0		GE/BAKER HUGHES										
1	STABILIZER			6 3/4	2.75	5.82	44.31		0		GE/BAKER HUGHES										
1	PULSAR SUB			7	4.83	12.68	38.49		0		GE/BAKER HUGHES										
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	15.63	25.81		0		GE/BAKER HUGHES										
1	RSS TOOL			7	4.33	9.22	10.18		0		GE/BAKER HUGHES										
Mud Motors																					
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defin Type			Bit To Bend								
14969163		.25		SEALED		7:8		6.4					4								
Sensors																					
Sensor Type				Sensor-Bit (ft)				Note													
NEAR BIT INCLINOMETER				6.89																	
GAMMA				12.38																	
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 (°)				
11:29	11:33	17,949.0	6.00	85.7	11	70	155.0	590	3,874.0	87.0	214	214	214	214	14.0	14.0					
12:01	12:48	17,955.0	89.00	114.1	26	65	337.0	599	4,255.0	123.0	193	193	193	193	18.0	18.0					
13:51	03:53	18,044.0	1,975.00	140.8	34	66	481.0	599	4,436.0	160.0	181	181	181	181	20.0	20.0					
04:13	04:26	20,019.0	0.00		17	0	0.0	566	3,780.0	0.0	193	193	193	193	0.0	0.0					
04:29	04:58	20,019.0	95.00	197.9	38	67	583.0	600	4,692.0	197.0	176	176	176	176	23.0	23.0					
04:58	06:00	20,114.0	87.00	87.0	38	67	583.0	600	4,692.0	197.0	176	176	176	176	23.0	23.0					
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		8.78		165.1		2.9		247.5		471.7		16.8		632.5		351.20		604.17		360.37	
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)						
3/3/2023 18:30		PIONEER DRILLING FLUIDS				OIL BASE		18,590.0		8.50		55			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				10.8		250.0			500.0						
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)			Pf (mL/mL)								
9.5		7.9																			
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
29,000			3,200.000			0			77.3/22.7			747.0			3.6						
Gel 10 sec (lbf/100ft²)						Gel 10 min (lbf/100ft²)						Gel 30 min (lbf/100ft²)									
9.000						13.000						16.000									
Comment																					
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)						
3/3/2023 10:00		PIONEER DRILLING FLUIDS				OIL BASE		17,949.0		8.55		61			113.0						
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				10.8		250.0			500.0						
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)			Pf (mL/mL)								
9.5		7.8																			
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				



29,500	3,200.000	0	76.8/23.2	721.0	3.8			
Gel 10 sec (lb <sup>f</sup> /100ft <sup>2</sup> )		Gel 10 min (lb <sup>f</sup> /100ft <sup>2</sup> )		Gel 30 min (lb <sup>f</sup> /100ft <sup>2</sup> )				
10.000		15.000		17.000				
Comment								
Last BOP Test								
Date	Test Type	Item Tested	Next Test Date	Com				
2/22/2023 08:30	BOP	BOP'S, 12/13/2022 20:00	3/15/2023 08:30	Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests								
Test Type		Depth (ftKB)		Dens Fluid (lb/gal)				
FORMATION INTEGRITY		1,957.0		12.96				
FORMATION INTEGRITY		7,020.0		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, 1,950.0ftKB	No	30.00	1,000.0		
CASING	STANDARD	2/22/2023 13:30	INTERMEDIATE, 6,997.0ftKB	No	30.00	2,500.0		
Kick Offs & Key Depths								
Date		Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)				
2/23/2023 11:00		KICK OFF	8,444.0	8,276.5				
2/24/2023 06:00		HEEL	9,466.0	8,929.4				
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	1,950.0	1,949.5	13 3/8	J55	54.50	BTC	1,317.7	
INTERMEDIATE	6,997.0	6,852.9	9 5/8	P110	40.00	BTC	3,392.3	
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		1938		Mud Diesel	9,269	65772
DIESEL	FUEL	GAL	0	2345		Rig Fuel	9,453	40386
DIESEL	FUEL AUXILIARY	GAL		0		Spare Rig Diesel Tank (Winter) (Transfered 4,738 gals to Rig Tank)	14,878	4738
Mud Additive Amounts								
Des	Type		Units	Rec	Consumed	On Loc	Cum Cons	
DRILLING FLUID TECH	SUPERVISION		EA	1	1	0.0	20	
DD TONE	ORGANOPHILLIC CLAY		LB SACK		6	88.0	107	
SOLTEX	FILTRATE CONTROL		LB SACK		10	59.0	36	
LIME	ALKALINITY CONTROL		LB SACK		25	275.0	408	
CALCIUM CHLORIDE	CALCIUM CHLORIDE		LB SACK		28	219.0	357	
DDF MUL	ALL IN ONE EMULSIFIER		GAL		95	1,165.0	800	
DD LEM	LOW END MODIFIER		GAL		100	610.0	700	
TECH SERVICE SUPPORT	SUPERVISION		EA	350	350	0.0	5,600	
DIESEL - FOR MUD	OIL MUD ADDITIVE		GAL		1938	22,109.0	39,430	
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						
11/7/2022 09:45	AS DRILL SURVEY	ODR, 11/4/2022 09:30						
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
18,009.00	90.41	171.49	8,935.21	9,233.63	-8,623.66	3,569.36	5.45	
18,104.00	90.16	167.19	8,934.73	9,328.44	-8,716.99	3,586.93	4.53	
18,198.00	89.89	165.70	8,934.69	9,422.43	-8,808.37	3,608.96	1.61	
18,387.00	90.41	165.67	8,934.20	9,611.43	-8,991.50	3,655.69	0.28	
18,481.00	90.41	166.27	8,933.53	9,705.42	-9,082.70	3,678.48	0.64	
18,576.00	89.15	165.58	8,933.89	9,800.42	-9,174.84	3,701.58	1.51	
18,670.00	89.52	165.85	8,934.98	9,894.41	-9,265.93	3,724.78	0.49	
18,765.00	89.92	165.53	8,935.45	9,989.41	-9,357.98	3,748.26	0.54	
18,860.00	89.92	165.33	8,935.58	10,084.41	-9,449.92	3,772.16	0.21	
18,955.00	90.32	164.87	8,935.38	10,179.40	-9,541.73	3,796.58	0.64	
19,049.00	90.59	165.49	8,934.63	10,273.39	-9,632.60	3,820.63	0.72	
19,144.00	90.26	165.63	8,933.93	10,368.38	-9,724.60	3,844.32	0.38	
19,239.00	90.01	164.93	8,933.70	10,463.38	-9,816.48	3,868.45	0.78	
19,334.00	89.27	164.47	8,934.30	10,558.35	-9,908.11	3,893.52	0.92	
19,429.00	91.09	163.79	8,934.00	10,653.30	-9,999.48	3,919.50	2.05	

19,524.00	91.55	166.06	8,931.81	10,748.26	-10,091.18	3,944.20	2.44
19,619.00	90.78	169.20	8,929.88	10,843.18	-10,183.94	3,964.54	3.40
19,713.00	89.79	169.89	8,929.41	10,936.99	-10,276.38	3,981.60	1.28
19,808.00	90.90	168.38	8,928.84	11,031.83	-10,369.67	3,999.51	1.97
19,902.00	91.18	165.87	8,927.14	11,125.79	-10,461.29	4,020.45	2.69
19,997.00	91.06	164.45	8,925.28	11,220.76	-10,553.10	4,044.77	1.50
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)	
268_5_SPBY_L_A1		-5,984.0		8,974.0			
268_5_SPBY_L_A2		-6,033.0		9,023.0			
268_5_SPBY_L_A3		-6,117.0		9,107.0			
268_6_SPBY_L_B1/JO MILL		-6,272.0		9,262.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0		9,311.0			
269_0_DEAN		-6,639.0		9,629.0			
304_0_STRAWN		-8,065.0		11,055.0			
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		
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		
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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							3
MID CONTINENT WELL LOGGING SERVICE INC							3
STALLION SOLIDS CONTROL INC							1

H & P 417

Accept:12/13/2022

Release:

Days Since LTI:581.00

Days Since RI:581.00

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/05/2023

Report #:20

DFS:19

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$62,055.49

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/13/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 3/04/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 502.00		Drilling Hours 3.31	% Rotating Time 100.00		End Depth (ftKB) 20,703.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$62,055.49		Cum Field Est To Date \$2,989,440.99	
24 HR ROP (ft/hr) 151.7	Circulating Hours 0.22	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,918.2		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$8,278.51		Cum Mud Field Est \$149,699.65	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,500.0			Daily Goal - Next 24 2,000.0			Goal Comments Gola not met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,300.0ftKB					
Avg Connection Gas 260.00		Avg Trip Gas 101.00		Avg Background Gas 290.00		Max Connection Gas 380.00		Max Trip Gas 173.00		Max Drill Gas 354.00	
Operations Summary Drill Prod Lat. w/RSS T/20,703', Trouble shoot Diff psi loss, TOH, change BHA, TIH T/6,721', slip & cut, TIH T/14,000' SD: 20,648', Inc: 90.44°, Amz:166.35°, Avg DLS: 0.44°, Above:0.8', Right:10.03'											
Operations Next Report Period TIH T/14,000' Drill 8.5" Prod Lat. w/RSS per Baker											
Operations At Report Time TIH at 14,000'											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 73% Complete  Savor Sub14,421:' Daily NPT:5.75 H&P:0 3rd Party:218.5 Pioneer: 16.75											
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	3.5	09:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/20,201' T/20,703' (502' @ 143.3 fph), WOB:30-35, GPM:600 SPP:4,725, Diff:625, RPM:70, TQ:22K, with full returns.		20,201.0	20,703.0		
09:30	3	12:30	PROD, DRL LAT	CIRC	NORMAL	Circ and prep to TOH due to motor failure.		20,703.0	20,703.0	3.00	15
12:30	0.5	13:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH pull 10 stds wet, F/20,703' T/19,755', hole taking proper fill.		20,703.0	20,703.0	0.50	15
13:00	0.25	13:15	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow check, well static, Pump slug.		20,703.0	20,703.0	0.25	15
13:15	6	19:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/19,755' T/6,530', hole taking proper fill. (Change breaks on DP & HWDP)		20,703.0	20,703.0	6.00	15
19:15	0.5	19:45	PROD, DRL LAT	HDL_ROT HD	NORMAL	Pull Rot head & install trip nipple.		20,703.0	20,703.0	0.50	15
19:45	1.25	21:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOH for BHA, F/6,530" T/BHA, hole taking proper fill.		20,703.0	20,703.0	1.25	15
21:00	0.25	21:15	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on LD BHA.		20,703.0	20,703.0	0.25	15
21:15	0.5	21:45	PROD, DRL LAT	LD_DIR	NORMAL	L/D BHA**(BHA #9)**. Function rams. LD NeoTork,Mud Motor. RSS and bit looked good. (Note a half handfull of cuttings were on top of float valve in mud motor, filter sub and inline		20,703.0	20,703.0	0.50	15

						screen was clear)				
21:45	0.25	22:00	PROD, DRL LAT	SFTY	NORMAL	PJSM with H&P crew & Baker on PU BHA.	20,703.0	20,703.0	0.25	15
22:00	0.5	22:30	PROD, DRL LAT	PU_ DIR	NORMAL	M/U BHA # 10, Re-Run Bit # 7 Halliburton HD65K and Baker RSS new mud motor and replace NeoTork withTomax. (Clean pump suction screens)	20,703.0	20,703.0	0.50	15
22:30	2	00:30	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/BHA T/6,721 with proper displacemnet. (Clean suction tanks)	20,703.0	20,703.0	2.00	15
00:30	0.5	01:00	PROD, DRL LAT	HDL_ROT HD	NORMAL	Remove trip nipple & install Rot head. (Clean suction tanks)	20,703.0	20,703.0	0.50	15
01:00	1.5	02:30	PROD, DRL LAT	SLIP_CUT	NORMAL	Slip and cut drlg line. (Clean suction tanks)	20,703.0	20,703.0	1.50	15
02:30	0.5	03:00	PROD, DRL LAT	RIG_SVC	NORMAL	Service rig. (Clean suction tanks)	20,703.0	20,703.0	0.50	15
03:00	0.5	03:30	PROD, DRL LAT	CIRC	NORMAL	Test Dir tools, MWD & run dianostics on RSS.	20,703.0	20,703.0	0.50	15
03:30	2.5	06:00	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/6,657 T/14,000', with proper displacemnet.	20,703.0	20,703.0	2.50	15

Interval Problems

DIRECTIONAL, 20,703.0ftKB, 3/4/2023 09:30

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
15		No	MWD / LWD	FAILURE - DOWNHOLE EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	While drilling lateral at 20,703 and lost all Diff psi, off btm psi was good, trouble shoot, TOH for BHA, on surface Mtr drained, checked Mtr & NeoTork no signs of visual damage, drill bit did not have any damage, RR drill bit & changed Mtr & NeoTork.

Drill Strings

BHA #9 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
7	8 1/2, HD65K, 13878786		PDC	HALLIBURTON
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	0-0-NO-A-X-0-NO-DMF	19.67	2,754.00
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)	Depth Out (ftKB)
19.67	2,754.00	140.0	17,949.0	20,703.0

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	3,017.75	20,201.00	58,846.1	413	RIG
24	HWDP	5	3.00	719.21	17,183.25	35,960.5	355	RIG
519	DRILL PIPE	5	4.28	16,336.61	16,464.04	318,563.9	319	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	127.43		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	1.88	43.19	123.66		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 7/8	3.00	26.51	80.47		0	ARSENAL
1	DRILL COLLAR - PONY	7	3.00	9.65	53.96		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	5.82	44.31		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.68	38.49		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.81		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.22	10.18		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
14969163	.25	SEALED	7:8	6.4		4

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	6.89	
GAMMA	12.38	

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	07:02	20,201.0	195.00	189.3	38	50	507.0	600	4,614.0	156.0	175	175	175	175	22.0	22.0	
07:13	09:30	20,396.0	307.00	134.6	38	46	536.0	600	4,644.0	143.0	176	176	176	176	22.0	22.0	
10:05	10:18	20,703.0	0.00		0	80	0.0	601	4,127.0	0.0	217	217	217	217	0.0	0.0	

BHA #10 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
7RR	8 1/2, HD65K, 13878786		PDC	HALLIBURTON
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	-----		
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
228	DRILL PIPE	5	4.28	7,172.71	24,345.36	139,867.8	494	RIG
24	HWDP	5	3.00	719.21	17,172.65	35,960.5	355	RIG
519	DRILL PIPE	5	4.28	16,336.61	16,453.44	318,563.9	319	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	116.83		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7 1/8	1.88	41.29	113.06		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 3/4	2.81	17.51	71.77		0	TOMAX

1	DRILL COLLAR - PONY	7	3.00	9.65	54.26		0	GE/BAKER HUGHES					
1	STABILIZER	6 3/4	2.75	6.12	44.61		0	GE/BAKER HUGHES					
1	PULSAR SUB	7	4.83	12.68	38.49		0	GE/BAKER HUGHES					
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.81		0	GE/BAKER HUGHES					
1	RSS TOOL	7	4.33	9.22	10.18		0	GE/BAKER HUGHES					
Mud Motors													
SN		Bend Angle		Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend		
15869114		1.25		SEALED		7:8		6.4				3.25	
Sensors													
Sensor Type			Sensor-Bit (ft)				Note						
NEAR BIT INCLINOMETER			6.89										
GAMMA			12.38										
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)		
8.55	8.89	166.9		2.9	247.9	476.1	16.8	633.6	360.11	627.21	360.37		
Mud Checks													
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)			T Flowline (° F)		
3/4/2023 17:00		PIONEER DRILLING FLUIDS			OIL BASE	20,703.0	8.50	60			77.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)			HTHP Pressure (psi)		
	10.000	6	7			8.0		250.0			500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
9.0		7.3											
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH	
31,000		3,800.000			0		76.9/23.1		796.0		4.3		
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
10.000				16.000				18.000					
Comment													
CCI - NO PSI													
Mud Checks													
Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)			T Flowline (° F)		
3/4/2023 09:00		PIONEER DRILLING FLUIDS			OIL BASE	20,641.0	8.55	63			118.0		
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)			HTHP Pressure (psi)		
	10.000	6	7			8.0		250.0			500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
9.5		7.8											
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH	
30,000		3,800.000			0		77.3/22.7		756.0		3.9		
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)					
11.000				17.000				20.000					
Comment													
CCI - NO PSI													
Last BOP Test													
Date		Test Type		Item Tested			Next Test Date		Com				
2/22/2023 08:30		BOP		BOP'S, 12/13/2022 20:00			3/15/2023 08:30		Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests													
Test Type						Depth (ftKB)			Dens Fluid (lb/gal)				
FORMATION INTEGRITY						1,957.0			12.96				
FORMATION INTEGRITY						7,020.0			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, 1,950.0ftKB			No	30.00		1,000.0	
CASING		STANDARD		2/22/2023 13:30		INTERMEDIATE, 6,997.0ftKB			No	30.00		2,500.0	
Kick Offs & Key Depths													
Date			Type			Top Depth (ftKB)			Depth Top (TVD) (ftKB)				
2/23/2023 11:00			KICK OFF			8,444.0			8,276.5				
2/24/2023 06:00			HEEL			9,466.0			8,929.4				
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		1,950.0		1,949.5		13 3/8	J55	54.50		BTC		1,317.7	
INTERMEDIATE		6,997.0		6,852.9		9 5/8	P110	40.00		BTC		3,392.3	
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	5599	7372		Transfred 5,599 F/reserve				7,496	73144	
DIESEL		FUEL	GAL		2121		Rig Fuel				7,332	42507	
DIESEL		FUEL AUXILIARY	GAL		5599		Spare Rig Diesel Tank (Winter) (Transferred 4,738 gals to Rig Tank)				9,279	10337	
Mud Additive Amounts													
Des				Type			Units	Rec	Consumed	On Loc		Cum Cons	

DRILLING FLUID TECH	SUPERVISION	EA	1	1	0.0	21
DD WET	WETTING AGENT	GAL		5	515.0	35
BULK BARITE - BARIUM SULFATE	WEIGHTING MATERIAL	TON		7	20.63	81
XMP GILSONITE	FILTRATE CONTROL	LB SACK		9	65.0	45
SOLTEX	FILTRATE CONTROL	LB SACK		10	49.0	46
DD TONE	ORGANOPHILLIC CLAY	LB SACK		16	72.0	123
DDF MUL	ALL IN ONE EMULSIFIER	GAL		20	1,145.0	820
CALCIUM CHLORIDE	CALCIUM CHLORIDE	LB SACK		35	184.0	392
LIME	ALKALINITY CONTROL	LB SACK		50	225.0	458
DD LEM	LOW END MODIFIER	GAL		115	495.0	815
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	5,950
DIESEL - FOR MUD	OIL MUD ADDITIVE	GAL	4953	7372	19,687.0	46,802

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
11/7/2022 09:45	AS DRILL SURVEY	ODR, 11/4/2022 09:30

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
20,271.00	90.44	164.20	8,920.60	11,494.58	-10,816.58	4,119.81	0.98
20,365.00	90.72	166.15	8,919.64	11,588.56	-10,907.44	4,143.86	2.10
20,460.00	89.98	165.90	8,919.06	11,683.56	-10,999.62	4,166.81	0.82
20,554.00	90.07	166.17	8,919.02	11,777.56	-11,090.85	4,189.49	0.30
20,648.00	90.44	166.35	8,918.60	11,871.56	-11,182.15	4,211.82	0.44

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)
268_5_SPBY_L_A1	-5,984.0		8,974.0		
268_5_SPBY_L_A2	-6,033.0		9,023.0		
268_5_SPBY_L_A3	-6,117.0		9,107.0		
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,311.0		
269_0_DEAN	-6,639.0		9,629.0		
304_0_STRAWN	-8,065.0		11,055.0		

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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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	3
MID CONTINENT WELL LOGGING SERVICE INC	3
STALLION SOLIDS CONTROL INC	1



H & P 417

Accept:12/13/2022

Release:

Days Since LTI:582.00

Days Since RI:582.00

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/06/2023

Report #:21

DFS:20

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$95,431.24

Daily Drilling Report

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)			
SSN ID00036584	Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	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	11/4/2022 09:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)										
Type	Subtype		Date	Note						
MILESTONE	ESTIMATED PAD RELEASE		3/13/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 3/04/23)plus one C/O and run prod casing.						
Daily Operations										
Footage/Meterage (ft) 2,007.00		Drilling Hours 17.46	% Rotating Time 100.00	End Depth (ftKB) 22,710.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$95,431.24		Cum Field Est To Date \$3,084,872.23	
24 HR ROP (ft/hr) 114.9	Circulating Hours 0.23	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,896.8	Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$6,763.52		Cum Mud Field Est \$156,463.17	Total AFE + Sup \$3,912,010.11	
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 2,000.0			Daily Goal - Next 24 1,628.0		Goal Comments Goal met		
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,300.0ftKB				
Avg Connection Gas 291.00		Avg Trip Gas 91.00	Avg Background Gas 235.00		Max Connection Gas 367.00		Max Trip Gas 215.00		Max Drill Gas 410.00	
Operations Summary TIH F/14,000' Drill 8.5" Prod Lat. w/RSS per Baker plan F/20,703' - T/22,710'. SD: 22,528', Inc: 90.37°, Amz:165.86°, Avg DLS: 1.12°, Above:5.04', Right:10.6'										
Operations Next Report Period Drill 8.5" Prod Lat. w/RSS to TD @ 24,338'+/-, Circ. K&M.										
Operations At Report Time Drilling 8.5" Production Lateral w/RSS @ 22,710'.										
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 85% Complete  Savor Sub16,428:' Daily NPT:4.75 H&P:0 3rd Party:222.5 Pioneer: 16.75										
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	3.5	09:30	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/14,000 T/20,379', with proper displacemnet.	20,703.0	20,703.0	3.50	15
09:30	1.25	10:45	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash down F/20,379 T/20,709'. Pump up survey at this time.	20,703.0	20,703.0	1.25	15
10:45	16.75	03:30	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/20,703' T/22,546' (1,843' @ 110.0 fph), WOB:20-30, GPM:550 SPP:4,400, Diff:375, RPM:60, TQ:20K, with full returns.	20,703.0	22,546.0		
03:30	0.5	04:00	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, perform drop inspection & change in-line screen.	22,546.0	22,546.0		
04:00	2	06:00	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/22,546' T/22,710' (164' @ 82 fph), WOB:20-30, GPM:550 SPP:4,400, Diff:375, RPM:60, TQ:20K, with full returns. SD: 22,528', Inc: 90.37°, Amz:165.86°, Avg DLS: 1.12°, Above:5.04', Right:10.6'	22,546.0	22,710.0		
Interval Problems										
DIRECTIONAL, 20,703.0ftKB, 3/4/2023 09:30										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
			MWD /			BAKER HUGHES	While drilling lateral at 20,703 and lost all Diff psi, off btm psi was good, trouble			

15	25.25	No	LWD	FAILURE - DOWNHOLE EQUIPMENT		OILFIELD OPERATIONS INC	shoot, TOH for BHA, on surface Mtr drained, checked Mtr & NeoTork no signs of visual damage, drill bit did not have any damage, RR drill bit & changed Mtr & NeoTork, TIH
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Drill Strings

BHA #10 , PRODUCTION - LATERAL

Bit Run	Drill Bit	Bit Type	Make
7RR	8 1/2, HD65K, 13878786	PDC	HALLIBURTON
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)
13/13/13/13/13/13	0.78	-----	17.46
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)
17.46	2,007.00	114.9	20,703.0
			Depth Out (ftKB)
			22,710.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
177	DRILL PIPE	5	4.28	5,537.35	22,710.00	107,978.3	463	RIG
24	HWDP	5	3.00	719.21	17,172.65	35,960.5	355	RIG
519	DRILL PIPE	5	4.28	16,336.61	16,453.44	318,563.9	319	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	116.83		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7 1/8	1.88	41.29	113.06		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 3/4	2.81	17.51	71.77		0	TOMAX
1	DRILL COLLAR - PONY	7	3.00	9.65	54.26		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	6.12	44.61		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.68	38.49		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.81		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.22	10.18		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15869114	1.25	SEALED	7:8	6.4		3.25

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	6.89	
GAMMA	12.38	

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 (°)
10:39	10:40	20,703.0	2.00	100.0	15	60	456.0	590	4,569.0	83.0	200	200	200	200	19.0	19.0	
10:56	10:58	20,705.0	3.00	100.0	10	59	257.0	590	4,371.0	88.0	206	206	206	206	17.0	17.0	
11:01	11:15	20,708.0	0.00		0	5	0.0	469	2,947.0	0.0	224	224	224	224	0.0	0.0	
11:17	11:30	20,708.0	26.00	118.2	16	66	169.0	591	4,279.0	113.0	198	198	198	198	19.0	19.0	
11:44	11:53	20,734.0	21.00	140.0	21	58	511.0	590	4,625.0	145.0	191	191	191	191	19.0	19.0	
12:06	13:32	20,755.0	227.00	158.7	32	66	759.0	583	4,777.0	191.0	183	183	183	183	21.0	21.0	
13:32	14:02	20,982.0	2.00	4.0	4	10	0.0	442	2,954.0	0.0	229	229	229	229	7.0	7.0	
14:03	18:35	20,984.0	622.00	137.3	31	53	671.0	572	4,582.0	156.0	183	183	183	183	20.0	20.0	
18:47	03:22	21,606.0	943.00	109.9	25	54	369.0	556	4,378.0	116.0	189	189	189	189	18.0	18.0	
04:00	06:00	22,549.0	161.00	80.5	25	54	369.0	556	4,378.0	116.0	189	189	189	189	18.0	18.0	

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)
8.60	8.89	132.9	2.3	229.4	409.8	15.6	634.3	395.85	719.52	360.37

Mud Checks

Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
3/5/2023 16:30		PIONEER DRILLING FLUIDS			OIL BASE	21,338.0	8.60	58		121.0	
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)
10.0		8.4									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
29,000		3,600.000		0		77.8/22.2		740.0		4.2	
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
9.000				13.000				16.000			

Comment

Mud Checks

Time		Mud Company			Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
3/5/2023 11:00		PIONEER DRILLING FLUIDS			OIL BASE	21,707.0	8.60	60		116.0	
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	6			8.0		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
9.5					7.8						
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
30,000		3,600.000		0		77.3/22.7		720.0		3.8	
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)				Gel 30 min (lbf/100ft²)			
10.000				14.000				16.000			

Comment								
Last BOP Test								
Date	Test Type	Item Tested		Next Test Date		Com		
2/22/2023 08:30	BOP	BOP'S, 12/13/2022 20:00		3/15/2023 08:30		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests								
Test Type			Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY			1,957.0		12.96			
FORMATION INTEGRITY			7,020.0		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, 1,950.0ftKB			No	30.00	1,000.0
CASING	STANDARD	2/22/2023 13:30	INTERMEDIATE, 6,997.0ftKB			No	30.00	2,500.0
Kick Offs & Key Depths								
Date		Type	Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
2/23/2023 11:00		KICK OFF	8,444.0		8,276.5			
2/24/2023 06:00		HEEL	9,466.0		8,929.4			
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	1,950.0	1,949.5		13 3/8	J55	54.50	BTC	1,317.7
INTERMEDIATE	6,997.0	6,852.9		9 5/8	P110	40.00	BTC	3,392.3
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	9279	2613		Transfred 9,279 F/reserve	14,162	75757
DIESEL	FUEL	GAL		2497		Rig Fuel	4,835	45004
DIESEL	FUEL AUXILIARY	GAL		9279		Spare Rig Diesel Tank (Winter) (Transferred 4,738 gals to Rig Tank)	0	9279
Mud Additive Amounts								
Des		Type		Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH		SUPERVISION		EA	1	1	0.0	22
TRUCKING		MISCELLANEOUS		EA	1	1	0.0	9
PMDHYPDF-A200		SHAKER SCREEN		EA		3	22.0	19
SOLTEX		FILTRATE CONTROL		LB SACK		9	40.0	55
XMP GILSONITE		FILTRATE CONTROL		LB SACK		15	50.0	60
DD TONE		ORGANOPHILLIC CLAY		LB SACK		16	56.0	139
LIME		ALKALINITY CONTROL		LB SACK		35	190.0	493
CALCIUM CHLORIDE		CALCIUM CHLORIDE		LB SACK		56	128.0	448
DD LEM		LOW END MODIFIER		GAL		80	415.0	895
TECH SERVICE SUPPORT		SUPERVISION		EA	350	350	0.0	6,300
DIESEL - FOR MUD		OIL MUD ADDITIVE		GAL	2040	2613	19,114.0	49,415
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			
11/7/2022 09:45			AS DRILL SURVEY		ODR, 11/4/2022 09:30			
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
20,732.00	89.97	166.18	8,918.30	11,955.56	-11,263.75	4,231.76	0.59	
20,826.00	90.86	164.72	8,917.62	12,049.55	-11,354.73	4,255.37	1.82	
20,921.00	90.74	165.00	8,916.30	12,144.52	-11,446.43	4,280.18	0.32	
21,015.00	90.96	165.00	8,914.90	12,238.50	-11,537.21	4,304.51	0.23	
21,109.00	90.77	166.32	8,913.48	12,332.49	-11,628.27	4,327.79	1.42	
21,204.00	90.62	164.59	8,912.33	12,427.47	-11,720.22	4,351.64	1.83	
21,299.00	90.52	165.95	8,911.39	12,522.46	-11,812.09	4,375.80	1.44	
21,393.00	90.46	165.75	8,910.58	12,616.46	-11,903.23	4,398.78	0.22	
21,488.00	90.74	165.87	8,909.59	12,711.45	-11,995.33	4,422.06	0.32	
21,582.00	90.52	166.28	8,908.55	12,805.45	-12,086.56	4,444.68	0.49	
21,677.00	90.43	167.64	8,907.77	12,900.42	-12,179.10	4,466.12	1.43	
21,771.00	90.77	167.59	8,906.78	12,994.38	-12,270.91	4,486.28	0.37	
21,865.00	90.80	166.52	8,905.49	13,088.35	-12,362.51	4,507.33	1.14	
21,960.00	90.77	166.07	8,904.19	13,183.33	-12,454.80	4,529.84	0.47	
22,054.00	90.80	165.44	8,902.90	13,277.32	-12,545.90	4,552.97	0.67	

22,149.00	90.40	165.59	8,901.91	13,372.32	-12,637.87	4,576.73	0.45
22,244.00	90.68	165.78	8,901.01	13,467.31	-12,729.92	4,600.21	0.36
22,338.00	90.49	165.07	8,900.05	13,561.30	-12,820.89	4,623.87	0.78
22,433.00	90.83	166.82	8,898.96	13,656.29	-12,913.04	4,646.94	1.88
22,528.00	90.37	165.86	8,897.97	13,751.28	-13,005.34	4,669.37	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		-5,910.0			8,900.0		
268_5_SPBY_L_A1		-5,984.0			8,974.0		
268_5_SPBY_L_A2		-6,033.0			9,023.0		
268_5_SPBY_L_A3		-6,117.0			9,107.0		
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,262.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,311.0		
269_0_DEAN		-6,639.0			9,629.0		
304_0_STRAWN		-8,065.0			11,055.0		
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	
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	
JONES, JUSTIN, SUPERINTENDENT		SUPERINTENDENT		432-653-7035	325-998-0261	JUSTIN.JONES@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							3
MID CONTINENT WELL LOGGING SERVICE INC							3
STALLION SOLIDS CONTROL INC							1

H & P 417

Accept:12/13/2022

Release:

Days Since LTI:583.00

Days Since RI:583.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/07/2023

Report #:22

Dfs:21

Afe #:9019710

Total Afe + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$134,328.93

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00	Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	TD Date 3/6/2023		
Jobs											
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status		
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/4/2022 09:30			IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/15/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 3/07/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 1,611.00		Drilling Hours 14.41	% Rotating Time 100.00	End Depth (ftKB) 24,321.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$134,328.93		Cum Field Est To Date \$3,182,728.36		
24 HR ROP (ft/hr) 111.8	Circulating Hours 6.28	% Sliding Time 0.00	End Depth (TVD) (ftKB) 8,888.6	Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$11,253.91		Cum Mud Field Est \$167,717.08	Total AFE + Sup \$3,912,010.11		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 1,628.0			Daily Goal - Next 24 0.0		Goal Comments Goal met			
Backbuild Yes	Lateral Inclination Toe Flat	Last Casing String INTERMEDIATE, 6,997.0ftKB				Next Casing String PRODUCTION, 24,297.0ftKB					
Avg Connection Gas 277.00		Avg Trip Gas 0.00	Avg Background Gas 337.00		Max Connection Gas 432.00		Max Trip Gas 0.00	Max Drill Gas 468.00			
Operations Summary Drill 8.5" Prod Lat. w/RSS to TD @ 24,321', Circ. K&M. SD: 24,321', Inc: 89.85°, Amz:164.39°, Avg DLS: 1.99°, Above:11.34', Right:5.11'											
Operations Next Report Period Circulate K&M, TOH T/6,997", pull rotating head & install trip nipple, TOH T/BHA, laydown BHA, pull wear bushing, change saver sub,Rig up casing tools, run 5.5" production casing											
Operations At Report Time K&M Clean up cycle at 24,321'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 100% Complete  Savor Sub18039:' Daily NPT:0 H&P:0 3rd Party:222.5 Pioneer: 16.75											
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	14.75	20:45	PROD, DRL LAT	DRL	NORMAL	Drill 8.5" Prod Lateral F/22,710' T/24,321' 1,611(' @ 109.2 fph), WOB:20-30, GPM:550 SPP:4,400, Diff:375, RPM:60, TQ:20K, with full returns. SD: 24,321', Inc: 89.85°, Amz:164.39°, Avg DLS: 1.99°, Above:11.34', Right:5.11'		22,710.0	24,321.0		
20:45	9.25	06:00	PROD, POST DRL	K&M_CLEANUP	NORMAL	Circ K&M clean up cycle of 6.5 Btms up out of a Total of 7.2 Btms up Recomendated by K&M. GPM 550 RPM 80 UP/ RPM 80 DN.		24,321.0	24,321.0		
Drill Strings											
BHA #10 , PRODUCTION - LATERAL											
Bit Run 7RR			Drill Bit 8 1/2, HD65K, 13878786			Bit Type PDC		Make HALLIBURTON			
Nozzles (1/32") 13/13/13/13/13			Bit Total Fluid Area (nozzles) (in²) 0.78		IADC Bit Dull -----		Hours Drilled By Bit (hr) 31.87		Depth Drilled By Bit (ft) 3,618.00		
BHA Drilling Time (hr) 31.87			BHA Depth Drilled (ft) 3,618.00		BHA ROP (ft/hr) 113.5		Depth In (ftKB) 20,703.0		Depth Out (ftKB) 24,321.0		

Drill String Components																					
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make											
177	DRILL PIPE			5	4.28	7,148.35	24,321.00	139,392.8	494	RIG											
24	HWDP			5	3.00	719.21	17,172.65	35,960.5	355	RIG											
519	DRILL PIPE			5	4.28	16,336.61	16,453.44	318,563.9	319	RIG											
1	SUB - FILTER			6 3/4	2.25	3.77	116.83		0	GE/BAKER HUGHES											
1	MOTOR - STABILIZER SLEEVE			7 1/8	1.88	41.29	113.06		0	GE/BAKER HUGHES											
1	ANTI-STALL TOOL			6 3/4	2.81	17.51	71.77		0	TOMAX											
1	DRILL COLLAR - PONY			7	3.00	9.65	54.26		0	GE/BAKER HUGHES											
1	STABILIZER			6 3/4	2.75	6.12	44.61		0	GE/BAKER HUGHES											
1	PULSAR SUB			7	4.83	12.68	38.49		0	GE/BAKER HUGHES											
1	MWD TOOL - NON-RETRIEVABLE			7	3.25	15.63	25.81		0	GE/BAKER HUGHES											
1	RSS TOOL			7	4.33	9.22	10.18		0	GE/BAKER HUGHES											
Mud Motors																					
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr Defln Type		Bit To Bend									
15869114		1.25		SEALED		7:8		6.4				3.25									
Sensors																					
Sensor Type				Sensor-Bit (ft)						Note											
NEAR BIT INCLINOMETER				6.89																	
GAMMA				12.38																	
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 (°)				
06:05	13:07	22,710.0	784.00	111.5	29	48	468.0	553	4,431.0	112.0	186	186	186	186	20.0	20.0					
13:20	20:43	23,494.0	827.00	112.1	28	50	514.0	549	4,474.0	125.0	185	185	185	185	21.0	21.0					
20:53	06:00	24,321.0	0.00		0	32	0.0	551	3,706.0	0.0	218	218	218	218	0.0	0.0					
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)	
8.60		8.96		129.4		2.3		227.3		402.5		15.4		628.6		424.46		793.47		360.37	
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)						
3/6/2023 17:00		PIONEER DRILLING FLUIDS				OIL BASE		23,929.0		8.60		59			122.0						
pV (cP)	YP (lbf/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)			HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)							
	12.000		6	6				8.4			250.0			500.0							
Solids (%)		Low Gravity Solids (%)					Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)						
9.5		7.9																			
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
28,500			3,200.000			0			76.2/23.8			712.0			4.3						
Gel 10 sec (lbf/100ft²)					Gel 10 min (lbf/100ft²)					Gel 30 min (lbf/100ft²)											
11.000					16.000					19.000											
Comment																					
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)						
3/6/2023 09:00		PIONEER DRILLING FLUIDS				OIL BASE		23,028.0		8.65		60			118.0						
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	6				8.4			250.0			500.0							
Solids (%)		Low Gravity Solids (%)					Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)						
10.0		8.4																			
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
29,000			3,600.000			0			77.2/22.8			719.0			3.6						
Gel 10 sec (lbf/100ft²)					Gel 10 min (lbf/100ft²)					Gel 30 min (lbf/100ft²)											
11.000					17.000					20.000											
Comment																					
Last BOP Test																					
Date		Test Type		Item Tested				Next Test Date				Com									
2/22/2023 08:30		BOP		BOP'S, 12/13/2022 20:00				3/15/2023 08:30				Test BOP 5000 High /250 LOW									
Leak Off and Formation Integrity Tests																					
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)									
FORMATION INTEGRITY								1,957.0				12.96									
FORMATION INTEGRITY								7,020.0				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, 1,950.0ftKB				No		30.00		1,000.0					
CASING		STANDARD		2/22/2023 13:30				INTERMEDIATE, 6,997.0ftKB				No		30.00		2,500.0					
Kick Offs & Key Depths																					
Date				Type				Top Depth (ftKB)				Depth Top (TVD) (ftKB)									
2/23/2023 11:00				KICK OFF				8,444.0				8,276.5									
2/24/2023 06:00				HEEL				9,466.0				8,929.4									
3/6/2023 20:45				TOE				24,321.0				8,888.6									
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	1,950.0		1,949.5		13 3/8	J55	54.50	BTC	1,317.7
INTERMEDIATE	6,997.0		6,852.9		9 5/8	P110	40.00	BTC	3,392.3
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	7194	13108		Mud Diesel (Ticket #58736)		8,248	88865
DIESEL	FUEL	GAL	7202	3156		Rig Fuel (Ticket #58211)		8,881	48160
Mud Additive Amounts									
Des		Type			Units	Rec	Consumed	On Loc	Cum Cons
PMDHYPDF-A200		SHAKER SCREEN			EA	8	1	29.0	20
TRUCKING		MISCELLANEOUS			EA	1	1	0.0	10
DRILLING FLUID TECH		SUPERVISION			EA	1	1	0.0	23
BACKHAUL		MISCELLANEOUS			PER LOAD	1	1	0.0	1
DD TONE		ORGANOPHILLIC CLAY			LB SACK	50	16	90.0	155
LIME		ALKALINITY CONTROL			LB SACK	100	80	210.0	573
CALCIUM CHLORIDE		CALCIUM CHLORIDE			LB SACK	168	84	212.0	532
DDF MUL		ALL IN ONE EMULSIFIER			GAL		155	990.0	975
DD LEM		LOW END MODIFIER			GAL	275	225	465.0	1,120
TECH SERVICE SUPPORT		SUPERVISION			EA	350	350	0.0	6,650
DIESEL - FOR MUD		OIL MUD ADDITIVE			GAL	14441	13108	20,447.0	62,523
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			
11/7/2022 09:45			AS DRILL SURVEY			ODR, 11/4/2022 09:30			
Survey Data - All surveys for 24 hr reporting period									
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)		
22,717.00	89.85	166.24	8,898.08	13,940.28	-13,188.74	4,715.03	0.27		
22,811.00	90.71	166.19	8,897.62	14,034.28	-13,280.03	4,737.42	0.92		
22,905.00	89.29	165.21	8,897.62	14,128.27	-13,371.12	4,760.64	1.84		
23,000.00	89.57	166.62	8,898.57	14,223.27	-13,463.26	4,783.76	1.51		
23,094.00	89.29	165.86	8,899.50	14,317.26	-13,554.55	4,806.12	0.86		
23,188.00	91.94	165.95	8,898.49	14,411.25	-13,645.71	4,829.00	2.82		
23,283.00	91.11	166.95	8,895.97	14,506.21	-13,738.03	4,851.25	1.37		
23,377.00	90.68	165.70	8,894.50	14,600.19	-13,829.35	4,873.47	1.41		
23,471.00	90.59	165.96	8,893.46	14,694.18	-13,920.49	4,896.48	0.29		
23,565.00	90.43	165.75	8,892.62	14,788.18	-14,011.63	4,919.45	0.28		
23,659.00	89.97	164.86	8,892.29	14,882.17	-14,102.56	4,943.30	1.07		
23,754.00	90.37	164.73	8,892.01	14,977.16	-14,194.23	4,968.22	0.44		
23,848.00	90.62	163.96	8,891.20	15,071.12	-14,284.74	4,993.58	0.86		
23,942.00	90.31	165.71	8,890.43	15,165.09	-14,375.46	5,018.17	1.89		
24,037.00	90.09	165.99	8,890.10	15,260.09	-14,467.58	5,041.39	0.37		
24,131.00	91.23	165.55	8,889.02	15,354.09	-14,558.68	5,064.50	1.30		
24,225.00	89.72	165.80	8,888.24	15,448.08	-14,649.76	5,087.75	1.63		
24,296.00	89.85	164.39	8,888.51	15,519.07	-14,718.36	5,106.01	1.99		
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			-5,910.0			8,900.0			
268_5_SPBY_L_A1			-5,984.0			8,974.0			
268_5_SPBY_L_A2			-6,033.0			9,023.0			
268_5_SPBY_L_A3			-6,117.0			9,107.0			
268_6_SPBY_L_B1/JO MILL			-6,272.0			9,262.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE			-6,321.0			9,311.0			
269_0_DEAN			-6,639.0			9,629.0			
304_0_STRAWN			-8,065.0			11,055.0			
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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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				3
MID CONTINENT WELL LOGGING SERVICE INC				3
STALLION SOLIDS CONTROL INC				1

H & P 417	
Accept:	12/13/2022
Release:	
Days Since LTI:	584.00
Days Since RI:	584.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	03/08/2023
Report #:	23
Dfs:	22
Afe #:	9019710
Total AFE + Sup:	\$3,912,010.11
Daily Field Est. (Cost):	\$270,941.88

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)				
SSN ID00036584		Property Sub	KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022	TD Date 3/6/2023	
Jobs											
Responsible Grp 2			Responsible Grp 3		Job Type	Start Date		End Date	Job Status		
DRL ENG - JACKIE LUTHER			AREA TEAM 2		ODR	11/4/2022 09:30			IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type	Subtype		Date	Note							
MILESTONE	ESTIMATED PAD RELEASE		3/15/2023	Batch Drilling 6th Prod. well on 6 well pad (Updated 3/07/23)plus one C/O and run prod casing.							
Daily Operations											
Footage/Meterage (ft) 0.00		Drilling Hours	% Rotating Time		End Depth (ftKB) 24,321.0	Target Depth (ftKB) 24,337.0		Daily Field Est Total \$270,941.88		Cum Field Est To Date \$3,454,440.24	
24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB) 8,888.6		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$6,596.95		Cum Mud Field Est \$174,314.03	Total AFE + Sup \$3,912,010.11	
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, 6,997.0ftKB				Next Casing String PRODUCTION, 24,297.0ftKB					
Avg Connection Gas 0.00		Avg Trip Gas 104.00	Avg Background Gas 0.00		Max Connection Gas 0.00		Max Trip Gas 126.00		Max Drill Gas 0.00		
Operations Summary Circulate K&M, TOH T/6,997", pull rotating head & install trip nipple, TOH T/BHA, laydown BHA, pull wear bushing, change saver sub,Rig up casing tools, run 5.5" production casing T/7000'											
Operations Next Report Period Run 5.5" Prod Csg & land @ 24,297, Burst air lock, Circ Cement casing.											
Operations At Report Time Running 5.5" Production Casing @ 7000'.											
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 100% Complete  Savor Sub18039:' Daily NPT:75 H&P:0 3rd Party:222.5 Pioneer: 17.50											
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	3	09:00	PROD, POST DRL	K&M_CLEANUP	NORMAL	Complete K&M clean up cycle for a Total of 7.2 Btms up Recomend by K&M. GPM 550 RPM 80 UP/ RPM 80 DN.		24,321.0	24,321.0		
09:00	0.25	09:15	PROD, POST DRL	FLOW_CHK	NORMAL	Flow check, well static.		24,321.0	24,321.0		
09:15	1	10:15	PROD, POST DRL	TOOH_ELEV	NORMAL	TOOH 10 stds wet F/24,321' T/23,371' hole taking proper fill. PU 350K		24,321.0	24,321.0		
10:15	0.25	10:30	PROD, POST DRL	FLOW_CHK	NORMAL	Flow check, well static, pump slug.		24,321.0	24,321.0		
10:30	6	16:30	PROD, POST DRL	TOOH_ELEV	NORMAL	TOOH for 5.5" Prod Csg F/23,371' T/6,990, hole taking proper fill.		24,321.0	24,321.0		
16:30	0.5	17:00	PROD, POST DRL	HDL_ROTHD	NORMAL	Pull rotating head and install trip nipple, flow check at shoe well static.		24,321.0	24,321.0		
17:00	2.25	19:15	PROD, POST DRL	TOOH_ELEV	NORMAL	TOH F/6,990' T/BHA, hole taking correct fill.		24,321.0	24,321.0		
19:15	0.25	19:30	PROD, POST	SFTY	NORMAL	PJSM with rig crew & Baker directional on L/D		24,321.0	24,321.0		

			DRL			BHA.				
19:30	0.75	20:15	PROD, POST DRL	LD_DIR	NORMAL	Lay down all directional BHA.	24,321.0	24,321.0		
20:15	1	21:15	PROD, POST DRL	WRBSH	NORMAL	Pull Wear Bushing, clean & prep rig floor.	24,321.0	24,321.0		
21:15	0.75	22:00	PROD, POST DRL	RIG_RPR	NORMAL	Change saver sub.	24,321.0	24,321.0	0.75	16
22:00	0.25	22:15	PROD, POST DRL	SFTY	NORMAL	PJSM with H&P & Casing Crews.	24,321.0	24,321.0		
22:15	1	23:15	PROD, CASE & CMT	RU_CSG	NORMAL	Rig Up Casing Crew.	24,321.0	24,321.0		
23:15	0.25	23:30	PROD, CASE & CMT	SFTY	NORMAL	PJSM on running 5.5" production casing	24,321.0	24,321.0		
23:30	0.25	23:45	PROD, CASE & CMT	RU_CSG	NORMAL	P/U Joint of casing perform dump test, L/D Joint.	24,321.0	24,321.0		
23:45	0.25	00:00	PROD, CASE & CMT	MU_SHOE_TRK	NORMAL	Pick Up Wet Shoe Joint & Pump Through Float collar	24,321.0	24,321.0		
00:00	6	06:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/45' T/7000' hole giving proper displacment.	24,321.0	24,321.0		

Interval Problems

RIG, 24,321.0ftKB, 3/7/2023 21:15

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
16	0.75	No	ROTARY SYSTEM	SAVER SUB		PIONEER NATURAL RESOURCES USA INC	Change saver sub per PNR footage @ 18,039'.

Drill Strings

BHA #10 , PRODUCTION - LATERAL

Bit Run	Drill Bit	Bit Type	Make
7RR	8 1/2, HD65K, 13878786	PDC	HALLIBURTON
Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull	Hours Drilled By Bit (hr)
13/13/13/13/13/13	0.78	1-1-WT-A-X-0-NO-TD	31.87
BHA Drilling Time (hr)	BHA Depth Drilled (ft)	BHA ROP (ft/hr)	Depth In (ftKB)
31.87	3,618.00	113.5	20,703.0
			Depth Out (ftKB)
			24,321.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
177	DRILL PIPE	5	4.28	7,148.35	24,321.00	139,392.8	494	RIG
24	HWDP	5	3.00	719.21	17,172.65	35,960.5	355	RIG
519	DRILL PIPE	5	4.28	16,336.61	16,453.44	318,563.9	319	RIG
1	SUB - FILTER	6 3/4	2.25	3.77	116.83		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7 1/8	1.88	41.29	113.06		0	GE/BAKER HUGHES
1	ANTI-STALL TOOL	6 3/4	2.81	17.51	71.77		0	TOMAX
1	DRILL COLLAR - PONY	7	3.00	9.65	54.26		0	GE/BAKER HUGHES
1	STABILIZER	6 3/4	2.75	6.12	44.61		0	GE/BAKER HUGHES
1	PULSAR SUB	7	4.83	12.68	38.49		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	7	3.25	15.63	25.81		0	GE/BAKER HUGHES
1	RSS TOOL	7	4.33	9.22	10.18		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15869114	1.25	SEALED	7:8	6.4		3.25

Sensors

Sensor Type	Sensor-Bit (ft)	Note
NEAR BIT INCLINOMETER	6.89	
GAMMA	12.38	

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)
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Mud Checks

Time	Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)	
3/7/2023 16:45	PIONEER DRILLING FLUIDS				OIL BASE	24,321.0	8.60	55		81.0
pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)			HTHP Temperature (° F)	HTHP Pressure (psi)	
	9.000	5	6		8.8			250.0	500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)
9.5		7.9								
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)	Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
28,000		3,200.000		0	77.3/22.7		750.0		3.9	
Gel 10 sec (lbf/100ft²)				Gel 10 min (lbf/100ft²)			Gel 30 min (lbf/100ft²)			
8.000				12.000			15.000			
Comment										
CCI - NO PSI										

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
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3/7/2023 10:00			PIONEER DRILLING FLUIDS			OIL BASE		24,321.0		8.60		57		74.0		
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				8.8			250.0			500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)			
9.5					7.9											
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH
29,000			3,600.000			0		76.8/23.2			761.0			4.3		
Gel 10 sec (lb/100ft²)					Gel 10 min (lb/100ft²)					Gel 30 min (lb/100ft²)						
					10.000					14.000					16.000	
Comment																
CCI - NO PSI																
Last BOP Test																
Date		Test Type		Item Tested				Next Test Date				Com				
2/22/2023 08:30		BOP		BOP'S, 12/13/2022 20:00				3/15/2023 08:30				Test BOP 5000 High /250 LOW				
Leak Off and Formation Integrity Tests																
Test Type						Depth (ftKB)				Dens Fluid (lb/gal)						
FORMATION INTEGRITY						1,957.0				12.96						
FORMATION INTEGRITY						7,020.0				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, 1,950.0ftKB				No	30.00		1,000.0			
CASING	STANDARD		2/22/2023 13:30			INTERMEDIATE, 6,997.0ftKB				No	30.00		2,500.0			
Kick Offs & Key Depths																
Date			Type			Top Depth (ftKB)				Depth Top (TVD) (ftKB)						
2/23/2023 11:00			KICK OFF			8,444.0				8,276.5						
2/24/2023 06:00			HEEL			9,466.0				8,929.4						
3/6/2023 20:45			TOE			24,321.0				8,888.6						
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		1,950.0		1,949.5			13 3/8	J55	54.50		BTC		1,317.7			
INTERMEDIATE		6,997.0		6,852.9			9 5/8	P110	40.00		BTC		3,392.3			
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	2422	569		Mud Diesel (Ticket #58380				10,109		89434			
DIESEL		FUEL	GAL	5070	1813		Rig Fuel (Ticket #58380)				12,130		49973			
Mud Additive Amounts																
Des				Type			Units		Rec	Consumed		On Loc		Cum Cons		
DRILLING FLUID TECH				SUPERVISION			EA		1	1		0.0		24		
BULK TANK BLOWERS				MISCELLANEOUS			PER DAY		8	8		0.0		21		
CALCIUM CHLORIDE				CALCIUM CHLORIDE			LB SACK			14		198.0		546		
BULK BARITE - BARIUM SULFATE				WEIGHTING MATERIAL			TON			14.42		26.0		95		
LIME				ALKALINITY CONTROL			LB SACK			20		190.0		593		
DD WET				WETTING AGENT			GAL			35		480.0		70		
DDF MUL				ALL IN ONE EMULSIFIER			GAL			45		945.0		1,020		
TECH SERVICE SUPPORT				SUPERVISION			EA		350	350		0.0		7,000		
DIESEL - FOR MUD				OIL MUD ADDITIVE			GAL			569		19,878.0		63,092		
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								
11/7/2022 09:45				AS DRILL SURVEY				ODR, 11/4/2022 09:30								
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				-5,910.0					8,900.0							
268_5_SPBY_L_A1				-5,984.0					8,974.0							
268_5_SPBY_L_A2				-6,033.0					9,023.0							
268_5_SPBY_L_A3				-6,117.0					9,107.0							
268_6_SPBY_L_B1/JO MILL				-6,272.0					9,262.0							
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE				-6,321.0					9,311.0							
269_0_DEAN				-6,639.0					9,629.0							
304_0_STRAWN				-8,065.0					11,055.0							

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
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
JONES, JUSTIN, SUPERINTENDENT	SUPERINTENDENT	432-653-7035	325-998-0261	JUSTIN.JONES@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				3
MID CONTINENT WELL LOGGING SERVICE INC				3
STALLION SOLIDS CONTROL INC				1



H & P 417

Accept:12/13/2022

Release:

Days Since LTI:585.00

Days Since RI:585.00

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/09/2023

Report #:24

DFS:23

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$57,740.78

Daily Drilling Report

API/UWI 42-003-48492-0000			Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)							
SSN ID00036584		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022		TD Date 3/6/2023			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/4/2022 09:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype		Date		Note									
MILESTONE		ESTIMATED PAD RELEASE		3/15/2023		Batch Drilling 6th Prod. well on 6 well pad (Updated 3/07/23)plus one C/O and run prod casing.									
TXRRC CALL		CEMENT PROD		3/8/2023 20:06		Christina #7									
Daily Operations															
Footage/Meterage (ft) 0.00			Drilling Hours		% Rotating Time		End Depth (ftKB) 24,321.0		Target Depth (ftKB) 24,337.0		Daily Field Est Total \$57,740.78		Cum Field Est To Date \$3,484,099.42		
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 8,888.6		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$2,590.00		Cum Mud Field Est \$176,904.03		Total AFE + Sup \$3,912,010.11	
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, 6,997.0ftKB						Next Casing String PRODUCTION, 24,302.0ftKB					
Avg Connection Gas 0.00			Avg Trip Gas 42.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 61.00		Max Drill Gas 0.00		
Operations Summary Run 5.5" Prod Csg to 10,900, (NPT 21 hrs) Drift was not accounted for and ended up in casing string, L/D Casing, retrieved drift from shoe jt,Run casing T/2,900', Casing slips failed, and backups failed too, new casing slips coming form yard.															
Operations Next Report Period Run 5.5" Prod Csg & land @ 24,297, Burst air lock, Circ.															
Operations At Report Time Running 5.5" Production Casing @ 2900'															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 100% Complete  Savor Sub0:' Daily NPT 23 H&P:0 3rd Party:245.5 Pioneer: 17.50															
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	3	09:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/7000' 10998' hole giving proper displacment. After picking up another Jt of casing drift was not accounted for and stabbed into stump. Csg crew member and tenaris rep observed drift was not removed and went into string.			24,321.0		24,321.0				
09:00	13.75	22:45	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Lay down 5.5" 20# P-110,-IC, W441 Casing F/10998' T/Shoe jt Correct displacement. Remove drift from shoe joint.			24,321.0		24,321.0		13.75	16	
22:45	0.25	23:00	PROD, CASE & CMT	SFTY	NORMAL	PJSM with H&P & New Casing Crew.			24,321.0		24,321.0		0.25	16	
23:00	0.25	23:15	PROD, CASE & CMT	RU_CSG	NORMAL	Rig Up torque trun			24,321.0		24,321.0		0.25	16	
23:15	0.25	23:30	PROD, CASE & CMT	RU_CSG	NORMAL	P/U Joint of casing perform dump test, L/D Joint.			24,321.0		24,321.0		0.25	16	

23:30	0.25	23:45	PROD, CASE & CMT	MU_SHOE_TRK	NORMAL	Pick Up Wet Shoe Joint & Pump Through Float collar	24,321.0	24,321.0	0.25	16
23:45	3.25	03:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/45.0 T/2900" hole giving proper displacment.	24,321.0	24,321.0	3.25	16
03:00	3	06:00	PROD, CASE & CMT	3RD_PTY	NORMAL	Primary slips failed, swapped out primary slips with backup slips, back up slips failed waiting on new slips form yard, (Note inspected slips before starting job)	24,321.0	24,321.0	3.00	16, 17

Interval Problems										
3RD PARTY, ftKB, 3/8/2023 09:00										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
16		No	PIPE HANDLING	CASING RUNNING SERVICE		TENARIS GLOBAL SERVICES USA	Drift was not accounted for and stabbed into stump. Csg crew member and tenaris rep observed drift was not removed and went into string. L/D Casing retrieve drift from shoe joint, Run casing back to 10,900'			

3RD PARTY, ftKB, 3/9/2023 03:00										
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment			
17		No	PIPE HANDLING	CASING RUNNING SERVICE		TRK ENTERPRISES INC	Primary slips failed, swapped out primary slips with backup slips, back up slips failed waiting on new slips form yard, (Note inspected slips before starting job)			

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)	
3/8/2023 19:00		PIONEER DRILLING FLUIDS			OIL BASE	24,321.0	8.65	58		70.0	
pV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
	9.000	5	6			9.2		250.0		500.0	
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
9.5		7.9									
Chlorides (mg/L)		Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
28,000		3,200.000		0		77.3/22.7		724.0		3.9	
Gel 10 sec (lb/100ft²)				Gel 10 min (lb/100ft²)				Gel 30 min (lb/100ft²)			
8.000				12.000				15.000			
Comment											
CCI - NO PSI											

Mud Checks													
Time		Mud Company			Type	Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)	
3/8/2023 07:00		PIONEER DRILLING FLUIDS			OIL BASE	24,321.0		8.65		58		70.0	
pV (cP)	YP (lb/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	9.000		5	6			9.0		250.0		500.0		
Solids (%)		Low Gravity Solids (%)			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
9.5		7.9											
Chlorides (mg/L)		Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)		pH
28,000		3,200.000			0		77.3/22.7		739.0		3.9		
Gel 10 sec (lb/100ft²)					Gel 10 min (lb/100ft²)					Gel 30 min (lb/100ft²)			
8.000					12.000					15.000			
Comment													
CCI - NO PSI													

Last BOP Test				
Date	Test Type	Item Tested		Com
2/22/2023 08:30	BOP	BOP'S, 12/13/2022 20:00		Test BOP 5000 High /250 LOW

Leak Off and Formation Integrity Tests		
Test Type		Dens Fluid (lb/gal)
FORMATION INTEGRITY		12.96
FORMATION INTEGRITY		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, 1,950.0ftKB	No	30.00	1,000.0
CASING	STANDARD	2/22/2023 13:30	INTERMEDIATE, 6,997.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths			
Date		Type	Depth Top (TVD) (ftKB)
2/23/2023 11:00		KICK OFF	8,276.5
2/24/2023 06:00		HEEL	8,929.4
3/6/2023 20:45		TOE	8,888.6

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	1,950.0	1,949.5	13 3/8	J55	54.50	BTC	1,317.7
INTERMEDIATE	6,997.0	6,852.9	9 5/8	P110	40.00	BTC	3,392.3

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	2	2	0.0	26	
TECH SERVICE SUPPORT	SUPERVISION	EA	350	350	0.0	7,350	
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			
11/7/2022 09:45		AS DRILL SURVEY		ODR, 11/4/2022 09:30			
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	-5,910.0		8,900.0				
268_5_SPBY_L_A1	-5,984.0		8,974.0				
268_5_SPBY_L_A2	-6,033.0		9,023.0				
268_5_SPBY_L_A3	-6,117.0		9,107.0				
268_6_SPBY_L_B1/JO MILL	-6,272.0		9,262.0				
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,311.0				
269_0_DEAN	-6,639.0		9,629.0				
304_0_STRAWN	-8,065.0		11,055.0				
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			
HAHN, MICHAEL, SUPERINTENDENT	SUPERINTENDENT	281-532-5976	361-564-8443	MICHAEL.HAHN@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			
HINES, NOLAN, FIELD ENGINEER	FIELD ENGINEER		432-813-0436	NOLAN.HINES@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			
TRANSIER, KENNETH, SUPERINTENDENT	SUPERINTENDENT		318-481-3868	KENNETH.TRANSIER@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							3
MID CONTINENT WELL LOGGING SERVICE INC							3
STALLION SOLIDS CONTROL INC							1

H & P 417

Accept:12/13/2022

Release:

Days Since LTI:586.00

Days Since RI:586.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:03/10/2023

Report #:25

DFS:24

AFE #:9019710

Total AFE + Sup:\$3,912,010.11

Daily Field Est. (Cost):\$48,333.78

API/UWI 42-003-48492-0000		Well Profile HORIZONTAL		Open Formation MIDDLE SPRABERRY (SPBY M A1)			Field Name SPRABERRY (TREND AREA)								
SSN ID00036584		Property Sub		KB-Grd (ft) 26.00		Orig KB Elevation (ft) 2,990.00		Ground Elevation (ft) 2,964.00		Spud Date 11/4/2022		TD Date 3/6/2023			
Jobs															
Responsible Grp 2				Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - JACKIE LUTHER				AREA TEAM 2			ODR		11/4/2022 09:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype		Date		Note									
MILESTONE		ESTIMATED PAD RELEASE		3/15/2023		Batch Drilling 6th Prod. well on 6 well pad (Updated 3/07/23)plus one C/O and run prod casing.									
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 24,321.0		Target Depth (ftKB) 24,337.0		Daily Field Est Total \$48,333.78		Cum Field Est To Date \$3,532,433.20			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 8,888.6		Target Depth Depth (TVD) (ftKB) 8,888.5		Daily Mud Field Est Total \$1,470.00		Cum Mud Field Est \$178,374.03		Total AFE + Sup \$3,912,010.11	
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, 6,997.0ftKB					Next Casing String PRODUCTION, 24,305.0ftKB						
Avg Connection Gas 0.00		Avg Trip Gas 68.00		Avg Background Gas 0.00			Max Connection Gas 0.00			Max Trip Gas 101.00		Max Drill Gas 0.00			
Operations Summary Run 5.5" Prod Csg to 10,900 (NPT 32 hrs) Continue Running 5.5" Prod Csg @ 23,100' (Note 7 jts damaged could not be re-ran)															
Operations Next Report Period Run 5.5" Prod Csg & land @ 24,304', Burst air lock, Circ. Cement Prod Csg. Back out landing joint, set packoff & BPV, N/D BOP. Install TA cap, Release Rig to University 7-20F 6H.															
Operations At Report Time Running 5.5" Production Casing @ 23,100'															
Remarks No Accidents, Incidents or Spills Reported Surface: 100% Complete Intermediate1: 100% Complete Production Vert: 100% Complete Production Curve: 100 % Complete Production Lateral: 100% Complete  Savor Sub 0:' Daily NPT 11 H&P:0 3rd Party:256.5 Pioneer: 17.50															
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, CASE & CMT	RIG_SVC	NORMAL	Rig service pefrorm drops inspection			24,321.0	24,321.0	0.50	16, 17			
06:30	1	07:30	PROD, CASE & CMT	3RD_PTY	NORMAL	Wait on slips, Rig up new slips.			24,321.0	24,321.0	1.00	16, 17			
07:30	9.5	17:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/2,900' T/10,900 hole giving proper displacment (Threads damaged on 7 jts and could not be re- run)			24,321.0	24,321.0	9.50	16			
17:00	3.75	20:45	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/10,900' T/15,380' hole giving proper displacment			24,321.0	24,321.0					
20:45	0.5	21:15	PROD, CASE & CMT	RIG_RPR	NORMAL	Replace dies in casing tongs.			24,321.0	24,321.0	0.50	18			
21:15	8.75	06:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5.5" 20# P-110,-IC, W441 Casing F/15,380' T/23,100' hole giving proper displacment			24,321.0	24,321.0					
Interval Problems															
3RD PARTY, 24,321.0ftKB, 3/8/2023 09:00															
Ref	Dur	Exclude From		SubType	Problem	Est Cost	Accountable Party		Comment						

#	(hr)	Problem Time Calcs?	PIPE HANDLING	Description	OR (Cost)	TENARIS GLOBAL SERVICES USA	Drift was not accounted for and stabbed into stump. Csg crew member and tenaris rep observed drift was not removed and went into string. L/D Casing retrieve drift from shoe joint, Run casing back to 10,900'					
16	32.00	No		CASING RUNNING SERVICE								
3RD PARTY, 24,321.0ftKB, 3/9/2023 03:00												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment					
17	4.50	No	PIPE HANDLING	CASING RUNNING SERVICE		TRK ENTERPRISES INC	Primary slips failed, swapped out primary slips with backup slips, back up slips failed waiting on new slips form yard, (Note inspected slips before starting job)					
3RD PARTY, 24,321.0ftKB, 3/9/2023 20:45												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment					
18	0.50	No	PIPE HANDLING	TONGS		TRK ENTERPRISES INC	Replace dies in casing tongs.					
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)	
3/9/2023 19:00		PIONEER DRILLING FLUIDS				OIL BASE	24,321.0	8.80	65		70.0	
pV (cP)	YP (lbF/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)		
	11.000		5	6		9.0		250.0		500.0		
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
9.5		7.2										
Chlorides (mg/L)			Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
28,000			3,200.000		0		77.3/22.7		721.0		3.9	
Gel 10 sec (lbF/100ft²)					Gel 10 min (lbF/100ft²)			Gel 30 min (lbF/100ft²)				
9.000					13.000			15.000				
Comment												
CCI - NO PSI												
Mud Checks												
Time		Mud Company				Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)		T Flowline (° F)	
3/9/2023 07:00		PIONEER DRILLING FLUIDS				OIL BASE	24,321.0	8.80	65		70.0	
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	6		9.4		250.0		500.0		
Solids (%)		Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
9.5		7.2										
Chlorides (mg/L)			Calcium (mg/L)		CaCl (ppm)		Oil Water Ratio		Electric Stab (V)		Lime (lb/bbl)	pH
28,000			3,200.000		0		77.3/22.7		715.0		3.8	
Gel 10 sec (lbF/100ft²)					Gel 10 min (lbF/100ft²)			Gel 30 min (lbF/100ft²)				
9.000					13.000			15.000				
Comment												
CCI - NO PSI												
Last BOP Test												
Date			Test Type		Item Tested			Next Test Date		Com		
2/22/2023 08:30			BOP		BOP'S, 12/13/2022 20:00			3/15/2023 08:30		Test BOP 5000 High /250 LOW		
Leak Off and Formation Integrity Tests												
Test Type							Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY							1,957.0		12.96			
FORMATION INTEGRITY							7,020.0		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, 1,950.0ftKB			No	30.00		1,000.0
CASING		STANDARD		2/22/2023 13:30		INTERMEDIATE, 6,997.0ftKB			No	30.00		2,500.0
Kick Offs & Key Depths												
Date				Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
2/23/2023 11:00				KICK OFF		8,444.0			8,276.5			
2/24/2023 06:00				HEEL		9,466.0			8,929.4			
3/6/2023 20:45				TOE		24,321.0			8,888.6			
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		1,950.0		1,949.5		13 3/8	J55	54.50	BTC		1,317.7	
INTERMEDIATE		6,997.0		6,852.9		9 5/8	P110	40.00	BTC		3,392.3	
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		1929		Rig Fuel	10,201	51902
DIESEL	MUD	GAL		0		Mud Diesel	10,109	89434
Mud Additive Amounts								
Des			Type	Units	Rec	Consumed	On Loc	Cum Cons
DRILLING FLUID TECH			SUPERVISION	EA	1	1	0.0	27
TECH SERVICE SUPPORT			SUPERVISION	EA	350	350	0.0	7,700
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				
11/7/2022 09:45		AS DRILL SURVEY		ODR, 11/4/2022 09:30				
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		-5,910.0			8,900.0			
268_5_SPBY_L_A1		-5,984.0			8,974.0			
268_5_SPBY_L_A2		-6,033.0			9,023.0			
268_5_SPBY_L_A3		-6,117.0			9,107.0			
268_6_SPBY_L_B1/JO MILL		-6,272.0			9,262.0			
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE		-6,321.0			9,311.0			
269_0_DEAN		-6,639.0			9,629.0			
304_0_STRAWN		-8,065.0			11,055.0			
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		
HAHN, MICHAEL, SUPERINTENDENT		SUPERINTENDENT		281-532-5976	361-564-8443	MICHAEL.HAHN@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		
HINES, NOLAN, FIELD ENGINEER		FIELD ENGINEER			432-813-0436	NOLAN.HINES@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		
TRANSIER, KENNETH, SUPERINTENDENT		SUPERINTENDENT			318-481-3868	KENNETH.TRANSIER@PXD.COM		
Personnel Log								
Company								Count
PIONEER NATURAL RESOURCES USA INC								3
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