

Daily Drilling Report

UNIVERSITY 7-43 7H						PERMIAN ASSET TEAM	
PINNERGY - 3						Job:	ODR
Accept: 10/29/2021						Report Date:	10/30/2021
Release:						Report #:	1
Days Since LTI:						DFS:	1
Days Since RI:						AFE #:	9017696
						Total AFE + Sup:	\$2,870,978.36
						Daily Field Est. (Cost):	\$124,496.72

P/U/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)		Field Name SPRABERRY (TREND AREA)											
SSN ID00038659	Property Sub	KB-Grd (ft) 26.50	Orig KB Elev (ft) 2,994.50	Ground Elevation (ft) 2,968.00	Spud Date 10/29/2021		TD Date										
Jobs																	
Responsible Grp 2		Responsible Grp 3		Job Type	Start Date		End Date	Job Status									
DRL ENG - ALEXANDER LINDBLAD		AREA TEAM 1		ODR	10/29/2021 12:30			IN PROGRESS									
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																	
Type		Subtype		Date		Note											
Type TXRRC CALL		Subtype SPUD		Date 10/29/2021		Note Mayra Opp #8											
Type TXRRC CALL		Subtype CEMENT SURF		Date 10/29/2021		Note Mayra Opp #8											
Daily Operations																	
Footage/Meterage (ft) 1,603.00		Drilling Hours (hr) 15.50		% Rotating Time (%) 95.16		End Depth (ftKB) 1,709.5	Target Depth (ftKB)	Daily Field Est Total (Cost) 124,496.72	Cum Field Est To Date (Cost) 124,496.72								
24 HR ROP (ft/hr) 103.4		Circulating Hours (hr)		% Sliding Time (%) 4.84		End Depth (TVD) (ftKB)	Target Depth (TVD) (ftKB)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)	Total AFE + Sup (Cost) 2,870,978.36							
Daily Goal Description			Daily Goal - Last 24			Daily Goal - Next 24			Goal Comments								
Backbuild	Lateral Inclination	Last Casing String					Next Casing String										
Avg Connection Gas		Avg Trip Gas		Avg Background Gas		Max Connection Gas		Max Trip Gas		Max Drill Gas							
Operations Summary Skid rig from the University 7-43 6H to the University 7-43 7H, Rig up over conductor, Pre spud & Drops Inspection, P/U Meteorite mud motor, tag @ 87', Drill F/87' T/1,690' (Well 3 of 3)																	
Operations Next Report Period Drill F/1,690' T/TD=1,910', Circulate and Cond., TOO H L/D Drill Pipe, L/D BHA, R/U Csg., RIH with 13 3/8" Casing, Circ. Casing Cap., R/U Cmt, Pump Surface Cmt., RD, Release Rig																	
Operations at Report Time Drill 17.5" surface hole @ 1,690'																	
Remarks																	
Time Log																	
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs (hr)	Prob Ref #					
12:30	0.5	13:00	CONST, DRL SURF	SKID	NORMAL	Rig down from the University 7-43 6H Skid rig from the University 7-43 6H to the University 7-43 7H			106.5	106.5							
13:00	0.5	13:30	CONST, DRL SURF	RU MIRU	NORMAL	R/U Hoses, Lines, Electrical.Set in Catwalk. Continue R/U of All Rig Components. R/U Transfer Pumps.			106.5	106.5							
13:30	0.5	14:00	CONST, DRL SURF	RIG_INSP	NORMAL	Pre Spud rig Inspection			106.5	106.5							
14:00	0.5	14:30	CONST, DRL SURF	PU_BHA	NORMAL	Pick up 17.5" surface BHA with Meteorite directional			106.5	106.5							
14:30	15.5	06:00	CONST, DRL SURF	DRL	NORMAL	Drill 17.5" surface hole F/87' T/1,690'			106.5	1,709.5							
Drill Strings																	
BHA #1 , SURFACE																	
Bit Run 1			Drill Bit 17 1/2in, DV616S, 300476				Bit Type PDC			Make DRILLPOINT							
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)		IADC Bit Dull -----		Hours Drilled By Bit (hr) 15.50			Depth Drilled By Bit (ft) 1,603.00							
BHA Drilling Time (hr) 15.50			BHA Depth Drilled (ft) 1,603.00		BHA ROP (ft/hr) 103.4		Depth In (ftKB) 106.5			Depth Out (ftKB) 1,709.5							
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
10	DRILL COLLAR			6	2.50	283.85	466.80	22,537.7	46	RIG							
1	SUB - XO			8	2.87	1.73	182.95	131.3	23	AMEGA WEST							
2	DRILL COLLAR			8	3.00	57.12	181.22	8,396.6	23	RIG							
1	SUB - SHOCK			9 5/8	3.00	11.73	124.10	950.1	15	AMEGA WEST							
2	DRILL COLLAR - NON MAG			8	3.50	60.58	112.37	8,378.2	14	CLEAR							
1	SUB - UBHO			8	3.25	3.50	51.79	499.8	5	CLEAR							
1	DRILL COLLAR - PONY, NON MAG			8	3.50	9.17	48.29	1,293.0	5	AMEGA WEST							
1	STABILIZER			8	3.00	6.45	39.12	915.9	3	AMEGA WEST							
1	MOTOR - STABILIZER SLEEVE			8 1/2	4.00	31.17	32.67	2,524.8	3	TMC							
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages		Lwr DefIn Type		Bit To Bend					
TMC 850-16		1.76				7:8		4.0				8					
Sensors																	
Sensor Type			Sensor-Bit (ft)			Note											
DIRECTIONAL			60.00														
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM (rpm)	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
14:30	17:15	106.5	294.00	106.9	12	55	300.0	750	800.0	190.0	32	33	31	32	4,000.0	2,000.0	0
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Printed: Saturday, October 30, 2021																	

Daily Drilling Report

UNIVERSITY 7-43 7H

PINNERGY - 3

Accept: 10/29/2021Release: Days Since LTI: Days Since RI:

PERMIAN ASSET TEAM

Job: ODR

Report Date: 10/30/2021

Report #: 1

DFS: 1

AFE #: 9017696

Total AFE + Sup: \$2,870,978.36

Daily Field Est. (Cost): \$124,496.72

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM (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 (°)
17:15	17:30	400.5	10.00	40.0	12	0	250.0	750	800.0	120.0	32	33	31	32	0.0	2,000.0	240
17:30	18:30	410.5	170.00	170.0	15	55	300.0	750	1,300.0	155.0	35	39	31	35	5,000.0	2,500.0	0
18:30	18:45	580.5	10.00	40.0	12	0	200.0	750	1,100.0	100.0	35	39	31	35	0.0	2,500.0	150
18:45	20:45	590.5	274.00	137.0	15	55	400.0	750	1,500.0	140.0	40	46	34	40	5,000.0	2,500.0	0
20:45	21:00	864.5	8.00	32.0	12	0	200.0	750	1,100.0	60.0	40	46	34	40	0.0	2,500.0	280
21:00	23:30	872.5	274.00	109.6	15	55	400.0	750	1,500.0	120.0	42	48	35	42	6,000.0	3,000.0	0
23:30	23:45	1,146.5	10.00	40.0	0	55	200.0	750	1,100.0	85.0	42	48	35	42	0.0	3,000.0	10
23:45	01:15	1,156.5	179.00	119.3	15	55	400.0	750	1,500.0	120.0	45	53	37	45	7,000.0	3,500.0	0
01:15	01:30	1,335.5	15.00	60.0	0	55	200.0	750	1,100.0	90.0	45	53	37	45	0.0	3,500.0	110
01:30	02:15	1,350.5	79.00	105.3	15	55	400.0	750	1,500.0	120.0	45	53	37	45	7,000.0	3,500.0	0
02:15	02:30	1,429.5	12.00	48.0	0	55	200.0	750	1,100.0	50.0	45	53	37	45	0.0	3,500.0	110
02:30	06:00	1,441.5	268.00	76.6	15	55	400.0	750	1,500.0	85.0	52	60	42	52	8,000.0	4,000.0	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)

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (°F)	
PV (cP)	YP (lb/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (°F)	HTHP Pressure (psi)
Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)		
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH	
Gel 10 sec (lb/100ft²)	Gel 10 min (lb/100ft²)	Gel 30 min (lb/100ft²)					
Comment							

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)

Gas Emissions - Flare

Type	Method	Dur (min)	Amount	Units	Com

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	CONTINENTAL-EMSCO	F-800	6	9.02	0.079	2,750.0
2	CONTINENTAL-EMSCO	F-800	6	9.02	0.079	2,750.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)

Deviation Surveys

Date	Description	Job
	FINAL SURVEY	
Date	Description	Job
10/30/2021	AS DRILL SURVEY	ODR, 10/29/2021 12:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
160.83	0.40	4.60	160.83	0.08	0.56	0.05	0.25
245.01	0.30	5.60	245.01	0.15	1.07	0.09	0.12

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Daily Drilling Report

PINNERGY - 3

Days Since RI:

Daily Field Est. (Cost): \$124,496.72

Daily Contacts

Personnel Log

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Daily Drilling Report

UNIVERSITY 7-43 7H		PERMIAN ASSET TEAM	
PINNERGY - 3		Job:	ODR
Accept: 10/29/2021	Release:	Report Date:	10/30/2021
Days Since LTI:	Days Since RI:	Report #:	2
		DFS:	1
		AFE #:	9017696
		Total AFE + Sup:	\$2,870,978.36
		Daily Field Est. (Cost):	\$50,559.71

API/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)		Field Name SPRABERRY (TREND AREA)					
SSN ID00038659	Property Sub	KB-Grd (ft) 26.50	Orig KB Elev (ft) 2,994.50	Ground Elevation (ft) 2,968.00	Spud Date 10/29/2021		TD Date				
Jobs											
Responsible Grp 2		Responsible Grp 3		Job Type	Start Date		End Date	Job Status			
DRL ENG - ALEXANDER LINDBLAD		AREA TEAM 1		ODR	10/29/2021 12:30			IN PROGRESS			
Job Dates (ex. Estimated Pad Release, TXRRC Calls)											
Type			Subtype		Date		Note				
Daily Operations											
Footage/Meterage (ft) 220.00		Drilling Hours (hr) 4.00		% Rotating Time (%) 100.00		End Depth (ftKB) 1,929.5		Target Depth (ftKB)	Daily Field Est Total (Cost) 50,559.71	Cum Field Est To Date (Cost) 274,183.89	
24 HR ROP (ft/hr) 55.0		Circulating Hours (hr)		% Sliding Time (%) 0.00		End Depth (TVD) (ftKB) 1,929.2		Target Depth (TVD) (ftKB)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)	Total AFE + Sup (Cost) 2,870,978.36
Daily Goal Description			Daily Goal - Last 24			Daily Goal - Next 24			Goal Comments		
Backbuild	Lateral Inclination	Last Casing String SURFACE, 1,906.8ftKB					Next Casing String				
Avg Connection Gas		Avg Trip Gas		Avg Background Gas		Max Connection Gas		Max Trip Gas		Max Drill Gas	
Operations Summary Drill F/1,690' T/TD=1,910', Circulate and Cond., TOO H L/D Drill Pipe, L/D BHA, R/U Csg., RIH with 13 3/8" Casing, Circ. Casing Cap., R/U Cmt, Pump Surface Cmt., RD, Release Rig (Well 3 of 3)											
Operations Next Report Period Rig down, Prepare all loads for rig move, Pressure wash rig and perform routine maintenance											
Operations at Report Time Release Rig to the Thunderbird 50-51AA 1H											
Remarks											
Time Log											
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs (hr)	Prob Ref #
06:00	3	09:00	CONST, DRL SURF	DRL	NORMAL	Drill 17.5" surface hole F/1,690' T/1,910'		1,709.5	1,929.5		
09:00	1	10:00	CONST, DRL SURF	CIRC	NORMAL	Pump 2x poly sweeps to circulate hole clean		1,929.5	1,929.5		
10:00	1.5	11:30	CONST, DRL SURF	L/D DP	NORMAL	Lay down Drill Pipe		1,929.5	1,929.5		
11:30	1.5	13:00	CONST, DRL SURF	L/D BHA	NORMAL	Lay down BHA		1,929.5	1,929.5		
13:00	1	14:00	CONST, DRL SURF	RU_CSG	NORMAL	PJSM with Pinnergy Rig Crew, Smith Casing Crew and PNR Rep over RU and RIH with 13 3/8" Casing. RU Casing Tools and Equipment. M/U shoe track and test floats.		1,929.5	1,929.5		
14:00	4	18:00	CONST, DRL SURF	CSG_W/O ROTATION	NORMAL	Run 48 joints 13 3/8"54.5# J55 casing.		1,929.5	1,929.5		
18:00	0.5	18:30	CONST, DRL SURF	CIRC	NORMAL	Circulate casing capacity while holding a pre job safety meeting with Perm5 cement crew		1,929.5	1,929.5		
18:30	3	21:30	CONST, DRL SURF	CMT	NORMAL	Rig up cement head and all lines, test lines to 2,000 psi. Cement with Perm5, Lead 1,375 sacks @ 13.0 ppg / Tail 550 sacks @ 14.8 ppg / bump plug @ 1,100 psi hold for 5 min / check floats / floats held / Bleed back 1 bbl of FW to cement truck / 140 bbls cement back to surface w/full returns during the job.		1,929.5	1,929.5		
21:30	0.5	22:00	CONST, DRL SURF	RD_CMT	NORMAL	Rig down cement equipment, Back out and L/D Landing Joint with Cactus Rep install TA cap		1,929.5	1,929.5		
Drill Strings											
BHA #1 , SURFACE											
Bit Run 1			Drill Bit 17 1/2in, DV616S, 300476				Bit Type PDC		Make DRILLPOINT		
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)			IADC Bit Dull -----TD		Hours Drilled By Bit (hr) 19.50		Depth Drilled By Bit (ft) 1,823.00	
BHA Drilling Time (hr) 19.50			BHA Depth Drilled (ft) 1,823.00			BHA ROP (ft/hr) 93.5		Depth In (ftKB) 106.5		Depth Out (ftKB) 1,929.5	
Drill String Components											
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make	
10	DRILL COLLAR			6	2.50	283.85	466.80	22,537.7	46	RIG	
1	SUB - XO			8	2.87	1.73	182.95	131.3	23	AMEGA WEST	
2	DRILL COLLAR			8	3.00	57.12	181.22	8,396.6	23	RIG	
1	SUB - SHOCK			9 5/8	3.00	11.73	124.10	950.1	15	AMEGA WEST	
2	DRILL COLLAR - NON MAG			8	3.50	60.58	112.37	8,378.2	14	CLEAR	
1	SUB - UBHO			8	3.25	3.50	51.79	499.8	5	CLEAR	
1	DRILL COLLAR - PONY, NON MAG			8	3.50	9.17	48.29	1,293.0	5	AMEGA WEST	
1	STABILIZER			8	3.00	6.45	39.12	915.9	3	AMEGA WEST	
1	MOTOR - STABILIZER SLEEVE			8 1/2	4.00	31.17	32.67	2,524.8	3	TMC	
Daily Drilling Report											
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Printed: Sunday, October 31, 2021											

Daily Drilling Report

UNIVERSITY 7-43 7H

PINNERGY - 3

Accept: 10/29/2021Release: Days Since LTI: Days Since RI:

PERMIAN ASSET TEAM

Job: ODR

Report Date: 10/30/2021

Report #: 2

DFS: 1

AFE #: 9017696

Total AFE + Sup: \$2,870,978.36

Daily Field Est. (Cost): \$50,559.71

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
TMC 850-16	1.76		7:8	4.0		8

Sensors

Sensor Type	Sensor-Bit (ft)	Note
DIRECTIONAL	60.00	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM (rpm)	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:15	1,709.5	32.00	128.0	15	55	300.0	750	1,500.0	95.0	57	67	47	57	10,000.0	5,000.0	0
06:15	06:45	1,741.5	20.00	40.0	12	55	250.0	750	1,100.0	25.0	57	67	47	57	0.0	5,000.0	110
06:45	09:00	1,761.5	168.00	74.7	15	55	300.0	750	1,500.0	85.0	61	71	51	61	10,000.0	5,000.0	0
09:00	10:00	1,929.5	0.00	0.0	0	55	0.0	750	1,100.0	0.0	61	71	51	61	0.0	5,000.0	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)

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (°F)	
PV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (°F)	HTHP Pressure (psi)
Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)		
Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH	
Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)					
Comment							

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
SURFACE	1,906.8	1,906.6	13 3/8	J55	54.50	BTC	

Cement

SURFACE CASING CEMENT, Casing, 10/30/2021 18:30

Cementing End Date	Wellbore	Technical Result	Comment
10/30/2021 21:30	ORIGINAL	SUCCESS	

Cement Stages

Description	Final Top De...	Btm (ftKB)	Top Pl...	Btm Pl...	Q Pump Init (...)	Q Pump Fina...	Q Pump Avg...	P Pump Final...	P Plug Bump...	Float...	Recip?	Rotated?
SURFACE CASING CEMENT	29.5	1,929.5	Yes	No	4	3	7	600.0	1,100.0	No	No	No

Cement Fluids

Fluid Type	Estimated Top (ftKB)	Est Btm (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)
SPACER	29.5	29.5	FRESH WATER	0.00	8.34
Fluid Type	Estimated Top (ftKB)	Est Btm (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)
LEAD CMT	29.5	1,363.5	CLASS C	1.90	13.00
Fluid Type	Estimated Top (ftKB)	Est Btm (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)
TAIL CMT	1,363.5	1,929.5	CLASS C	1.33	14.80
Fluid Type	Estimated Top (ftKB)	Est Btm (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)
DSPLMT	29.5	1,867.1	FRESH WATER	0.00	8.34

Gas Emissions - Flare

Type	Method	Dur (min)	Amount	Units	Com

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL	1,088	1,088	0	Rig Fuel	0	1,088.0

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)

Deviation Surveys

Date	Description	Job
	FINAL SURVEY	
Date	Description	Job
10/30/2021	AS DRILL SURVEY	ODR, 10/29/2021 12:30

Daily Drilling Report

Page 2/3

Printed: Sunday, October 31, 2021

Daily Drilling Report

PINERGY - 3

Release:

Days Since RI:

Daily Field Est. (Cost): \$50,559.71

Printed: Sunday, October 31, 2021

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 533.00

Days Since RI: 533.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/5/2022

Report #: 3

DFS: 2

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$9,106.98

API/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)			Field Name SPRABERRY (TREND AREA)				
SSN ID00038659		Property Sub	KB-Grd (ft) 26.50	Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021	TD Date		
Jobs											
Responsible Grp 2				Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - ALEXANDER LINDBLAD				AREA TEAM 1		ODR	10/29/2021 12:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)											
Type		Subtype				Date		Note			
MILESTONE		ESTIMATED PAD RELEASE				1/15/2022		3rd Well on 3 well Pad (2/28/21)			
Daily Operations											
Footage/Meterage (ft) 0.00		Drilling Hours	% Rotating Time	End Depth (ftKB) 1,929.5	Target Depth (ftKB) 19,471.0	Daily Field Est Total \$9,106.98		Cum Field Est To Date \$374,733.28			
24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB) 1,929.2	Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$		Cum Mud Field Est \$	Total AFE + Sup \$2,911,162.04		
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 0.0			Daily Goal - Next 24 1,000.0		Goal Comments Goal Met			
Backbuild	Lateral Inclination	Last Casing String SURFACE, 1,906.8ftKB				Next Casing String PROPOSED INTERMEDIATE, 7,006.0ftKB					
Avg Connection Gas 0.00		Avg Trip Gas 21.00	Avg Background Gas 21.00		Max Connection Gas 0.00		Max Trip Gas 35.00	Max Drill Gas 0.00			
Operations Summary Skid, N/U BOP, R/U, Test BOP&E											
Operations Next Report Period P/U BHA, TIH, Drill out Shoe track, FIT, Drill Intermediate 1.											
Operations At Report Time Test BOP&E											
Remarks Surf: 100% Int. 1: Prod. Vert.: Prod. Curve: Prod. Lateral:											
Time Log											
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
01:00	1	02:00	MOB, MOVE	SKID	NORMAL	Skid rig to the University 7-43 7H.		1,929.5	1,929.5		
02:00	1	03:00	MOB, RIG UP	NU_BOPE	NORMAL	Nipple up BOP&E, FLOW Line, Choke Line, Install Turnbuckles		1,929.5	1,929.5		
03:00	3	06:00	MOB, RIG UP	TEST_BOPE	NORMAL	Test BOP&E 5000 High, 250 Low, Manifold, Rams & Blinds, Floor Valves, Back to Pumps, Annular 3500 High 250 Low		1,929.5	1,929.5		
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 1/5/2022 01:30		Mud Company PIONEER DRILLING FLUIDS			Type WATER BASE	Depth (ftKB) 1,921.0	Density (lb/gal) 10.30	Funnel Viscosity (s/qt) 37		T Flowline (° F) 87.0	
pV (cP) 1.0	YP (lb/100ft²) 4.000	Vis 3rpm 1	Vis 6rpm 1	Filtrate (mL/30min) 0.0		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)	
Solids (%) 11.5		Low Gravity Solids (%) 1.2			Sand (%) 0.1	MBT (lb/bbl) 5.0		Pm (mL/mL) 0.200		Pf (mL/mL)	
Chlorides (mg/L) 171,000		Calcium (mg/L) 2,000.000		CaCl (ppm) 0		Oil Water Ratio 0.9/99.1		Electric Stab (V)		Lime (lb/bbl) 0.1	pH 9.9
Gel 10 sec (lb/100ft²) 1.000				Gel 10 min (lb/100ft²) 1.000				Gel 30 min (lb/100ft²) 1.000			
Comment New Well											
Casing Pressure Test											
Test Type		Test Subtype		Date		Item Tested		Failed?	Time (min)		P (psi)
CASING		STANDARD		11/3/2021 12:00		SURFACE, 1,906.8ftKB		No	30.00		1,000.0
Kick Offs & Key Depths											
Date		Type	Top Depth (ftKB)				Depth Top (TVD) (ftKB)				
No Data											
Casing Strings											
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR		106.5				20	H40	78.67			
SURFACE		1,906.8		1,906.6		13 3/8	J55	54.50	BTC		
Gas Emissions - Flare											
Type		Method		Dur (Min)		Amount		Units		Com	
No Data											
Job Supply Amounts											
Supply Item Des		Type	Unit Label	Received	Consumed	Returned	Note		Cum On Loc	Cum Consumed	
DIESEL		MUD	GAL	25717			Transferred from' UNIVERSITY 7-43 6H'		25,717	0	
DIESEL		FUEL	GAL	8810			Transferred from' UNIVERSITY 7-43 6H'		8,810	1088	
DIESEL		FUEL	GAL	10929			Transferred from' UNIVERSITY 7-43 6H'		19,739	1088	
Mud Additive Amounts											
Des	Type	Units		Rec	Consumed		On Loc		Cum Cons		
Pump Operations											
Pump #	Make			Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
2	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
3	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	

Pump Checks						
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
No Data						
Deviation Surveys						
Date		Description		Job		
10/30/2021 06:00		AS DRILL SURVEY		ODR, 10/29/2021 12:30		
Formations						
Formation Name	Prog Top Override (TVD SS) (ft(ely))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
251_0_RSRL	878.0		2,116.5			
255_0_TNSL_TOP_DOL	90.0		2,904.5			
256_0_YATES	-167.0		3,161.5			
257_0_SEVEN RIVERS	-436.0		3,430.5			
258_0_QUEEN	-1,007.0		4,001.5			
259_0_GRAYBURG	-1,556.0		4,550.5			
261_0_SAN ANDRES	-1,786.0		4,780.5			
263_0_SAN_ANDRES_SHALE	-2,768.0		5,762.5			
265_0_CLEARFORK/POP	-3,871.0		6,865.5			
ICP1	-3,911.0		6,905.5			
267_0_SPBY_U_A1/267_0_SPBY	-5,448.0		8,442.5			
267_5_SPBY_M_A1	-5,757.0		8,751.5			
268_5_SPBY_L_A1	-5,984.0		8,978.5			
ILP	-6,195.0		9,189.5			
PBHL/TD	-6,125.0		9,119.5			
268_6_SPBY_L_B1/JO MILL	-6,263.0		9,257.5			
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	
BROWN, DAN, SUPERINTENDENT		SUPERINTENDENT		469-203-9731	DAN.BROWN@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER		ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
WAGNON, TIM, SUPERINTENDENT		SUPERINTENDENT		409-489-2208	TIM.WAGNON@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		830-832-5619	GILBERT.ORSAK@PXD.COM	
MCSPERITT, GREG, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		580-729-0858	GREG.MCSPERITT@PXD.COM	
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE		RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log						
Company						Count
PIONEER NATURAL RESOURCES USA INC						2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO						13
PIONEER NATURAL RESOURCES USA INC						1
ALTITUDE ENERGY PARTNERS INC						3
KAYDEN INDUSTRIES USA INC						1
STRATAGRAPH INC						2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:534.00

Days Since RI:534.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/6/2022

Report #:4

DFS:3

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$271,912.84

42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)			Field Name SPRABERRY (TREND AREA)									
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date				
Jobs																
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status	
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																
Type		Subtype						Date		Note						
MILESTONE		ESTIMATED PAD RELEASE						1/15/2022		3rd Well on 3 well Pad (1/5/22)						
Daily Operations																
Footage/Meterage (ft) 2,325.00		Drilling Hours 12.50		% Rotating Time 77.33		End Depth (ftKB) 4,264.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$271,912.84		Cum Field Est To Date \$647,348.12				
24 HR ROP (ft/hr) 186.0		Circulating Hours		% Sliding Time 22.67		End Depth (TVD) (ftKB) 4,248.7		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$1,140.40		Cum Mud Field Est \$1,140.40		Total AFE + Sup \$2,911,162.04		
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,000.0				Daily Goal - Next 24 2,600.0				Goal Comments Goal met				
Backbuild Yes		Lateral Inclination		Last Casing String SURFACE, 1,906.8ftKB						Next Casing String PROPOSED INTERMEDIATE, 7,006.0ftKB						
Avg Connection Gas 13.00		Avg Trip Gas 21.00		Avg Background Gas 12.00				Max Connection Gas 21.00		Max Trip Gas 35.00		Max Drill Gas 20.00				
Operations Summary																
P/U Intermediate 1 BHA, TIH T/1,820', Drill out shoe track plus 10' new formation T/1,939', CTCH, FIT to 12.5 ppg MWE, Drill Intermediate 1 T/4,264' (20% sliding, 7° tangent, 3.30' below, 3.44' right)																
Operations Next Report Period																
Drill Intermediate 1 to a TD of 6,941' +/-, circulate hole clean, and POOH for 9 5/8" casing																
Operations At Report Time																
Drilling Intermediate 1 @ 4,264'																
Remarks																
Surf: 100%																
Int. 1: 47%																
Prod. Vert.:																
Prod. Curve:																
Prod. Lateral:																
Time Log																
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #				
06:00	1.25	07:15	INT, PRE DRL	RU MIRU	NORMAL	Continue rigging up rig related equipment. (flow line, Fill up line, Mud bucket line, Grounds)			1,929.5	1,929.5						
07:15	0.5	07:45	INT, PRE DRL	WRBSH	NORMAL	Install wear bushing.			1,929.5	1,929.5						
07:45	0.25	08:00	INT, PRE DRL	SFTY	NORMAL	Prejob safety meeting and JSA on picking up Intermediate BHA.			1,929.5	1,929.5						
08:00	3.25	11:15	INT, PRE DRL	PU_ DIR	NORMAL	P/U Intermediate Directional BHA.			1,929.5	1,929.5						
11:15	2.5	13:45	INT, PRE DRL	TIH_ELEV	NORMAL	TIH with intermediate BHA T/1,620'.			1,929.5	1,929.5						
13:45	0.5	14:15	INT, PRE DRL	HDL_ROTHD	NORMAL	Install Rotating head and fill up line.			1,929.5	1,929.5						
14:15	0.25	14:30	INT, PRE DRL	TIH_ELEV	NORMAL	TIH F/1,620' T/1,820. Tagged cement.			1,929.5	1,929.5						
14:30	1.5	16:00	INT, PRE DRL	DRL_OUT	NORMAL	Drill out shoe track F/1,820' T/1,929'.			1,929.5	1,929.5						
16:00	0.5	16:30	INT, PRE DRL	DRL	NORMAL	Drill new formation F/1929' T/1939'.			1,929.5	1,939.0						
16:30	0.5	17:00	INT, PRE DRL	CIRC	NORMAL	Circulate to clean hole for FIT.			1,939.0	1,939.0						
17:00	0.5	17:30	INT, PRE DRL	FIT	NORMAL	Perform 12.5 ppg MWE FIT.			1,939.0	1,939.0						
17:30	12.5	06:00	INT, DRL	DRL	NORMAL	Drilling Interm F/1,939' T/4,264', (2,325' @ 186 'hr) WOB 35-45, RPM 60, GPM 890, SPP 4600, DIFF 900 , torq 18k			1,939.0	4,264.0						
Drill Strings																
BHA #2 , INTERMEDIATE																
Bit Run 2			Drill Bit 12 1/4, SPL616, 56397						Bit Type PDC		Make ULTERRA					
Nozzles (1/32") 12/12/12/11/11/11/11			Bit Total Fluid Area (nozzles) (in²) 0.91			IADC Bit Dull -----			Hours Drilled By Bit (hr) 12.50		Depth Drilled By Bit (ft) 2,325.00					
BHA Drilling Time (hr) 12.50			BHA Depth Drilled (ft) 2,325.00			BHA ROP (ft/hr) 186.0			Depth In (ftKB) 1,939.0		Depth Out (ftKB) 4,264.0					
Drill String Components																
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make						
90	DRILL PIPE			5	4.27	2,830.08	4,264.00	55,186.6	175	RIG						
9	HWDP			5	3.00	267.90	1,433.92	13,127.1	119	RIG						
1	DRILLING JARS - HYDRAULIC			6 3/4	2.56	30.10	1,166.02	2,709.0	106	KNIGHT OIL TOOLS LLC						
21	HWDP			5	3.00	628.41	1,135.92	30,792.1	104	RIG						
1	SUB - XO			5	3.00	3.30	507.51	247.5	73	RIG						
12	DRILL COLLAR - SPIRALED			8	2.88	353.52	504.21	51,967.4	72	Rig						
1	SUB - XO			8	2.81	3.64	150.69	273.0	21	STABIL DRILL						
1	SUB - SHOCK			8 1/16	3.50	32.08	147.05	5,132.8	20	SCOUT						
1	STABILIZER			8 1/4	2.88	7.25	114.97	1,000.5	15	STABIL DRILL						
1	DRILL COLLAR - NON MAG			8 1/8	3.75	30.59	107.72	4,374.4	14	STABIL DRILL						
1	MWD COLLAR - RETRIEVABLE			8	3.75	29.30	77.13	2,637.0	10	STABIL DRILL						
1	SUB - UBHO			8	3.50	3.13	47.83	447.6	7	GORDON						
1	STABILIZER			8 1/4	2.81	7.53	44.70	1,039.1	7	STABIL DRILL						
1	MOTOR - STABILIZER SLEEVE			9 5/8	3.00	35.67	37.17	5,600.2	6	ALTITUDE ENERGY PARTNERS						
Mud Motors																
SN		Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type		Bit To Bend			
AEP9002		1.75		NOT SEALED			7:8		5.9				8.35			
Sensors																
Sensor Type				Sensor-Bit (ft)				Note								
GAMMA				55.73												
DIRECTIONAL				68.00												

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 (°)				
17:30	18:00	1,939.0	155.00	310.0	40	60	700.0	850	3,600.0	310.0	150	155	145	150	155.0	5,000.0	0				
18:00	18:30	2,094.0	28.00	56.0	30	0	300.0	850	3,200.0	56.0	150	155	145	150	0.0	5,000.0	82				
18:30	19:00	2,122.0	73.00	146.0	40	60	600.0	895	3,800.0	146.0	150	155	145	150	155.0	5,000.0	0				
19:00	19:30	2,195.0	30.00	60.0	30	0	300.0	895	3,400.0	60.0	150	155	145	150	0.0	5,000.0	90				
19:30	19:45	2,225.0	75.00	300.0	40	60	750.0	895	4,000.0	300.0	150	155	145	150	155.0	5,000.0	0				
19:45	20:15	2,300.0	35.00	70.0	30	0	250.0	895	3,500.0	70.0	150	155	145	150	0.0	5,000.0	90				
20:15	22:30	2,335.0	646.00	287.1	40	60	750.0	895	3,900.0	287.1	150	155	145	150	155.0	5,000.0	0				
22:30	22:45	2,981.0	20.00	80.0	20	0	400.0	895	3,900.0	80.0	150	155	145	150	0.0	5,000.0	270				
22:45	00:00	3,001.0	245.00	196.0	48	60	750.0	895	4,200.0	196.0	150	155	145	150	155.0	5,000.0	0				
00:00	00:20	3,246.0	24.00	72.0	28	0	400.0	895	3,800.0	72.0	150	155	145	150	0.0	5,000.0	20				
00:20	03:45	3,270.0	725.00	212.2	48	60	800.0	895	4,300.0	212.2	158	167	155	158	155.0	4,700.0	0				
03:45	04:30	3,995.0	25.00	33.3	30	0	400.0	895	4,300.0	33.3	158	167	155	158	0.0	4,700.0	330				
04:30	06:00	4,020.0	244.00	162.7	48	60	800.0	895	4,300.0	162.7	158	167	155	158	155.0	4,700.0	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)	
10.15		10.18		482.4		4.1		317.0		923.9		25.1		382.0		62.72		268.85		245.66	
Mud Checks																					
Time		Mud Company					Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)						
1/5/2022 23:00		PIONEER DRILLING FLUIDS					WATER BASE		3,149.0		10.15		28		99.0						
pV (cP)		YP (lb/100ft²)		Vis 3rpm		Vis 6rpm		Filtrate (mL/30min)		HTHP Filtrate (mL/30min)			HTHP Temperature (° F)			HTHP Pressure (psi)					
2.0		1.000		1		1		0.0													
Solids (%)			Low Gravity Solids (%)					Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)					
11.5			1.8					0.0		2.5			0.400								
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)			pH			
163,000			1,200.000			0			0.9/99.1						0.1			11.0			
Gel 10 sec (lb/100ft²)								Gel 10 min (lb/100ft²)						Gel 30 min (lb/100ft²)							
1.000								1.000						2.000							
Comment																					
Maintain mw 10.2 -10.4 ppg. Maintain ph with lime 9-11. Mix .56 ppb of lime. Built 300 bbls gel mud with 20 ppb of bentonite, .83 ppb soda ash. Mix 1 phpa in 80 bbls gel mud for sweeps.																					
Last BOP Test																					
Date		Test Type	Item Tested		Next Test Date		Com														
1/5/2022 06:00		BOP	BOP'S, 1/5/2022 06:00		1/26/2022 06:00		Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.														
Leak Off and Formation Integrity Tests																					
Test Type										Depth (ftKB)				Dens Fluid (lb/gal)							
FORMATION INTEGRITY										1,906.0				12.48							
Casing Pressure Test																					
Test Type		Test Subtype			Date			Item Tested				Failed?		Time (min)		P (psi)					
CASING		STANDARD			11/3/2021 12:00			SURFACE, 1,906.8ftKB				No		30.00		1,000.0					
Kick Offs & Key Depths																					
Date			Type		Top Depth (ftKB)					Depth Top (TVD) (ftKB)											
No Data																					
Casing Strings																					
Description			Set Depth (ftKB)			Set Depth (TVD) (ftKB)			OD (in)		Grade	Wt/Len (lb/ft)			Top Thread		P LeakOff (psi)				
CONDUCTOR			106.5						20		H40	78.67									
SURFACE			1,906.8			1,906.6			13 3/8		J55	54.50			BTC		1,235.1				
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			3014							16,725		4102					
DIESEL			MUD	GAL			0							25,717		0					
WATER			FRESH	BBL		0	0			Meter reading 65,518				0		8617					
Mud Additive Amounts																					
Des				Type						Units		Rec	Consumed		On Loc		Cum Cons				
BENTONITE - BULK				VISCOSIFIER						TON			5		14.0		5				
WC DEFOAMER				DEFOAMER						GAL		32	4		28.0		4				
LIME				ALKALINITY CONTROL						SACK		65	10		90.0		10				
SODA ASH				ALKALINITY CONTROL						SACK		50	5		95.0		5				
Pump Operations																					
Pump #		Make					Model		Liner Size (in)		Stroke (in)		Vol/Stk (bbl/stk)			P Max (psi)					
1		GARDNER-DENVER					PZ-11		5 1/2		10.98		0.081			6,000.0					
2		GARDNER-DENVER					PZ-11		5 1/2		10.98		0.081			6,000.0					
3		GARDNER-DENVER					PZ-11		5 1/2		10.98		0.081			6,000.0					
Pump Checks																					
Pump #		Depth (ftKB)			Time				P (psi)		Strokes (spm)			Q Flow (gpm)			Eff (%)				
1		3,884.0			1/6/2022 04:36				315.0		20			64			95				
1		3,884.0			1/6/2022 04:36				345.0		30			97			95				
1		3,884.0			1/6/2022 04:36				390.0		40			129			95				
2		3,884.0			1/6/2022 04:36				320.0		20			64			95				
2		3,884.0			1/6/2022 04:36				335.0		30			97			95				
2		3,884.0			1/6/2022 04:36				370.0		40			129			95				
3		3,884.0			1/6/2022 04:37				315.0		20			64			95				
3		3,884.0			1/6/2022 04:37				320.0		30			97			95				
3		3,884.0			1/6/2022 04:37				365.0		40			129			95				
Deviation Surveys																					
Date					Description							Job									
Date					Description							Job									
10/30/2021 06:00					AS DRILL SURVEY							ODR, 10/29/2021 12:30									
Survey Data - All surveys for 24 hr reporting period																					
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)							
2,026.00		1.30		68.11		2,025.71		19.49		2.26		19.36		0.79							
2,120.00		2.74		84.02		2,119.65		22.77		2.89		22.59		1.63							
2,214.00		4.69		85.86		2,213.45		28.85		3.40		28.65		2.08							
2,309.00		6.58		87.19		2,307.99		38.16		3.95		37.97		1.99							
2,404.00		7.56		88.83		2,402.27		49.80		4.35		49.65		1.05							

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
2,498.00	7.55	89.97	2,495.45	62.07	4.48	62.01	0.16
2,592.00	7.09	90.31	2,588.68	73.94	4.45	73.98	0.49
2,687.00	7.16	90.11	2,682.95	85.62	4.40	85.77	0.08
2,781.00	7.03	90.17	2,776.23	97.13	4.38	97.38	0.14
2,875.00	6.70	91.84	2,869.56	108.24	4.18	108.61	0.41
2,969.00	6.45	86.78	2,962.94	118.92	4.30	119.36	0.67
3,064.00	6.68	77.58	3,057.32	129.74	5.79	130.09	1.13
3,158.00	6.23	75.95	3,150.72	140.26	8.21	140.37	0.52
3,252.00	6.96	75.49	3,244.10	150.98	10.87	150.84	0.78
3,347.00	7.73	78.28	3,338.32	163.06	13.61	162.66	0.89
3,441.00	7.25	77.64	3,431.52	175.27	16.17	174.65	0.52
3,535.00	7.12	79.55	3,524.78	187.00	18.49	186.17	0.29
3,630.00	7.31	79.50	3,619.03	198.91	20.66	197.90	0.20
3,724.00	6.74	79.07	3,712.32	210.39	22.80	209.20	0.61
3,818.00	6.66	80.09	3,805.68	221.34	24.78	219.99	0.15
3,913.00	6.19	83.71	3,900.08	231.97	26.29	230.50	0.65
4,007.00	6.79	75.56	3,993.48	242.55	28.23	240.92	1.17
Formations							
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
259_0_GRAYBURG		-1,556.0			4,550.5		
261_0_SAN ANDRES		-1,786.0			4,780.5		
263_0_SAN_ANDRES_SHALE		-2,768.0			5,762.5		
265_0_CLEARFORK/POP		-3,871.0			6,865.5		
ICP1		-3,911.0			6,905.5		
267_0_SPBY_U_A1/267_0_SPBY		-5,448.0			8,442.5		
267_5_SPBY_M_A1		-5,757.0			8,751.5		
268_5_SPBY_L_A1		-5,984.0			8,978.5		
ILP		-6,195.0			9,189.5		
PBHL/TD		-6,125.0			9,119.5		
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5		
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	
VILLESCAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER		ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
WAGNON, TIM, SUPERINTENDENT		SUPERINTENDENT			409-489-2208	TIM.WAGNON@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			830-832-5619	GILBERT.ORSAK@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE		RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:535.00

Days Since RI:535.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/7/2022

Report #:5

DFS:4

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$421,216.29

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)				Field Name SPRABERRY (TREND AREA)								
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50			Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date				
Jobs																	
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																	
Type			Subtype						Date		Note						
MILESTONE			ESTIMATED PAD RELEASE						1/15/2022		3rd Well on 3 well Pad (1/5/22)						
Daily Operations																	
Footage/Meterage (ft) 2,693.00		Drilling Hours 19.75		% Rotating Time 60.76		End Depth (ftKB) 6,957.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$421,216.29		Cum Field Est To Date \$1,068,564.41					
24 HR ROP (ft/hr) 136.4		Circulating Hours		% Sliding Time 39.24		End Depth (TVD) (ftKB) 6,921.0		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$3,336.88		Cum Mud Field Est \$4,477.28		Total AFE + Sup \$2,911,162.04			
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,600.0				Daily Goal - Next 24 0.0				Goal Comments Goal met					
Backbuild Yes		Lateral Inclination		Last Casing String SURFACE, 1,906.8ftKB						Next Casing String PROPOSED INTERMEDIATE, 7,006.0ftKB							
Avg Connection Gas 22.00		Avg Trip Gas 0.00		Avg Background Gas 20.00				Max Connection Gas 41.00		Max Trip Gas 0.00		Max Drill Gas 106.00					
Operations Summary Drill Intermediate 1 F/ 4,264' T/6,957-ICP1, CTCH, Flow Check (static), TOO H. (30% sliding, 7° tangent, 6.0' below, 7.70' right)																	
Operations Next Report Period TOOH, Laydown BHA, Rig up casing crew, Run 9 5/8" casing, circulate, and pump Interm 1 cement.																	
Operations At Report Time POOH @ 6,000' to run 9 5/8" casing																	
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: Prod. Curve: Prod. Lateral:																	
Time Log																	
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com				Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #				
06:00	10.75	16:45	INT, DRL	DRL	NORMAL	Drilling Interm F/4,264' T/5,775', (1,511' @ 141 '/hr) WOB 35-65, RPM 60, GPM 890, SPP 4600, DIFF 900 , torq 18k				4,264.0	5,775.0						
16:45	0.5	17:15	INT, DRL	RIG_SVC	NORMAL	Rig service and drops inspection.				5,775.0	5,775.0						
17:15	9	02:15	INT, DRL	DRL	NORMAL	Drilling Interm F/5,775' T/6,957' (casing point) (1182' @ 131 '/hr) WOB 35-65, RPM 60, GPM 890, SPP 4700, DIFF 900 , torq 22k				5,775.0	6,957.0						
02:15	2.5	04:45	INT, POST DRL	CIRC	NORMAL	Circulate hole clean, pump caliber sweep, calculated 20% washout. Spot 300bbbls of 10.4ppg pad mud				6,957.0	6,957.0						
04:45	0.25	05:00	INT, POST DRL	FLOW_CHK	NORMAL	Flow check. (static)				6,957.0	6,957.0						
05:00	1	06:00	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/ 6,957' T/ 6,000'				6,957.0	6,957.0						
Drill Strings																	
BHA #2 , INTERMEDIATE																	
Bit Run 2			Drill Bit 12 1/4, SPL616, 56397							Bit Type PDC		Make ULTERRA					
Nozzles (1/32") 12/12/12/12/11/11/11/11			Bit Total Fluid Area (nozzles) (in²) 0.91			IADC Bit Dull -----			Hours Drilled By Bit (hr) 32.25		Depth Drilled By Bit (ft) 5,018.00						
BHA Drilling Time (hr) 32.25			BHA Depth Drilled (ft) 5,018.00			BHA ROP (ft/hr) 155.6			Depth In (ftKB) 1,939.0		Depth Out (ftKB) 6,957.0						
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
176	DRILL PIPE			5	4.27	5,523.08	6,957.00	107,700.1	227	RIG							
9	HWDP			5	3.00	267.90	1,433.92	13,127.1	119	RIG							
1	DRILLING JARS - HYDRAULIC			6 3/4	2.56	30.10	1,166.02	2,709.0	106	KNIGHT OIL TOOLS LLC							
21	HWDP			5	3.00	628.41	1,135.92	30,792.1	104	RIG							
1	SUB - XO			5	3.00	3.30	507.51	247.5	73	RIG							
12	DRILL COLLAR - SPIRALED			8	2.88	353.52	504.21	51,967.4	72	Rig							
1	SUB - XO			8	2.81	3.64	150.69	273.0	21	STABIL DRILL							
1	SUB - SHOCK			8 1/16	3.50	32.08	147.05	5,132.8	20	SCOUT							
1	STABILIZER			8 1/4	2.88	7.25	114.97	1,000.5	15	STABIL DRILL							
1	DRILL COLLAR - NON MAG			8 1/8	3.75	30.59	107.72	4,374.4	14	STABIL DRILL							
1	MWD TOOL - RETRIEVABLE			8	3.75	29.30	77.13	2,637.0	10	STABIL DRILL							
1	SUB - UBHO			8	3.50	3.13	47.83	447.6	7	GORDON							
1	STABILIZER			8 1/4	2.81	7.53	44.70	1,039.1	7	STABIL DRILL							
1	MOTOR - STABILIZER SLEEVE			9 5/8	3.00	35.67	37.17	5,600.2	6	ALTITUDE ENERGY PARTNERS							
Mud Motors																	
SN		Bend Angle		Bearing Type			Lobe Config		# Stages	Lwr Defln Type		Bit To Bend					
AEP9002		1.75		NOT SEALED			7:8		5.9			8.35					
Sensors																	
Sensor Type				Sensor-Bit (ft)				Note									
GAMMA				55.73													
DIRECTIONAL				68.00													
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:45	4,264.0	107.00	142.7	45	60	1,000.0	892	4,700.0	142.7	195	199	190	195	22,000.0	4,700.0	0
06:45	08:00	4,371.0	40.00	32.0	45	0	300.0	892	4,000.0	32.0	195	199	190	195	0.0	4,700.0	30

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 (°)				
08:00	10:45	4,411.0	519.00	188.7	45	60	900.0	892	4,700.0	188.7	195	199	190	195	22,000.0	4,700.0	0				
10:45	12:00	4,930.0	25.00	20.0	45	0	400.0	892	4,000.0	20.0	195	199	190	195	0.0	4,700.0	0				
12:00	15:00	4,955.0	635.00	211.7	45	60	900.0	892	4,700.0	211.7	195	199	190	195	22,000.0	4,700.0	0				
15:00	16:00	5,590.0	50.00	50.0	45	0	400.0	892	4,000.0	50.0	195	199	190	195	0.0	4,700.0	0				
16:00	16:45	5,640.0	341.00	454.7	45	60	900.0	892	4,700.0	170.5	195	199	190	195	22,000.0	4,700.0	0				
17:15	19:30	5,981.0	40.00	17.8	45	0	400.0	892	4,000.0	26.7	195	199	190	195	0.0	4,700.0	30				
19:30	21:00	6,021.0	331.00	220.7	45	60	900.0	892	4,700.0	220.7	195	199	190	195	22,000.0	4,700.0	0				
21:00	22:15	6,352.0	28.00	22.4	45	0	200.0	892	4,000.0	22.4	195	199	190	195	0.0	4,700.0	340				
22:15	23:30	6,380.0	266.00	212.8	45	60	900.0	892	4,700.0	212.8	195	199	190	195	22,000.0	4,700.0	0				
23:30	00:15	6,646.0	18.00	24.0	45	0	200.0	892	4,000.0	24.0	195	199	190	195	0.0	4,700.0	350				
00:15	02:15	6,664.0	293.00	146.5	45	60	900.0	892	4,700.0	146.5	195	199	190	195	22,000.0	4,700.0	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)	
10.45		10.48		491.6		4.2		315.9		944.9		25.0		380.7		110.41		596.02		245.66	
Mud Checks																					
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)		T Flowline (° F)							
1/6/2022 23:59		PIONEER DRILLING FLUIDS				WATER BASE		6,522.0		10.45		30		103.0							
pV (cP)		YP (lb/100ft²)		Vis 3rpm		Vis 6rpm		Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (° F)		HTHP Pressure (psi)							
2.0		1.000		1		1		0.0													
Solids (%)			Low Gravity Solids (%)					Sand (%)		MBT (lb/bbl)			Pm (mL/mL)		Pf (mL/mL)						
13.0			2.9					0.0		5.0			0.500								
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)			Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH				
164,000			1,200.000			0			0.9/99.1						0.1		11.0				
Gel 10 sec (lb/100ft²)						Gel 10 min (lb/100ft²)						Gel 30 min (lb/100ft²)									
1.000						1.000						2.000									
Comment																					
Maintain mw 10.2 -10.4 ppg. Maintain ph with lime 9-11. Mix 1.56 ppb of lime. Built 300 bbls gel mud with 20 ppb of bentonite, .83 ppb soda ash. Mix 1 phpa in 80 bbls gel mud for sweeps. Pad mud 350 bbls with 1 ppb of pac l, 1 ppb empire xan, 1.42 ppb soda ash, 1.2 ppb BCI h2s scavenger																					
Last BOP Test																					
Date		Test Type	Item Tested		Next Test Date		Com														
1/5/2022 06:00		BOP	BOP'S, 1/5/2022 06:00		1/26/2022 06:00		Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.														
Leak Off and Formation Integrity Tests																					
Test Type										Depth (ftKB)				Dens Fluid (lb/gal)							
FORMATION INTEGRITY										1,906.0				12.48							
Casing Pressure Test																					
Test Type		Test Subtype			Date			Item Tested				Failed?		Time (min)		P (psi)					
CASING		STANDARD			11/3/2021 12:00			SURFACE, 1,906.8ftKB				No		30.00		1,000.0					
Kick Offs & Key Depths																					
Date			Type			Top Depth (ftKB)					Depth Top (TVD) (ftKB)										
No Data																					
Casing Strings																					
Description			Set Depth (ftKB)			Set Depth (TVD) (ftKB)			OD (in)		Grade	Wt/Len (lb/ft)			Top Thread		P LeakOff (psi)				
CONDUCTOR			106.5						20		H40	78.67									
SURFACE			1,906.8			1,906.6			13 3/8		J55	54.50			BTC		1,235.1				
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		7318		5032							19,011		9134					
DIESEL		MUD	GAL				0							25,717		0					
WATER		FRESH	BBL		0		0				Meter reading 65,518			0		8617					
Mud Additive Amounts																					
Des					Type					Units	Rec	Consumed		On Loc		Cum Cons					
BCI ZC 1500 H2S SCAVENGER					SPECIALTY					GAL		1		3.0		1					
BENTONITE - BULK					VISCOSIFIER					TON		2		12.0		7					
XANTHAN GUM					VISCOSIFIER					SACK	80	11		83.0		11					
WC DEFOAMER					DEFOAMER					GAL		14		14.0		18					
LIME					ALKALINITY CONTROL					SACK		40		50.0		50					
NUT SHELL					LOST CIRCULATION					SACK		2		79.0		2					
PAC LV					FLUID LOSS ADDITIVES					SACK	40	10		85.0		10					
PHPA					VISCOSIFIER					GAL		2		5.0		2					
SODA ASH					ALKALINITY CONTROL					SACK		15		80.0		20					
Pump Operations																					
Pump #		Make				Model		Liner Size (in)		Stroke (in)		Vol/Stk (bbl/stk)			P Max (psi)						
1		GARDNER-DENVER				PZ-11		5 1/2		10.98		0.081			6,000.0						
2		GARDNER-DENVER				PZ-11		5 1/2		10.98		0.081			6,000.0						
3		GARDNER-DENVER				PZ-11		5 1/2		10.98		0.081			6,000.0						
Pump Checks																					
Pump #		Depth (ftKB)			Time			P (psi)		Strokes (spm)			Q Flow (gpm)			Eff (%)					
1		6,341.0			1/7/2022 03:00			340.0		20			64			95					
1		6,341.0			1/7/2022 03:00			350.0		30			97			95					
1		6,341.0			1/7/2022 03:00			380.0		40			129			95					
2		6,341.0			1/7/2022 03:00			330.0		20			64			95					
2		6,341.0			1/7/2022 03:01			350.0		30			97			95					
2		6,341.0			1/7/2022 03:01			380.0		40			129			95					
3		6,341.0			1/7/2022 03:01			330.0		20			64			95					
3		6,341.0			1/7/2022 03:01			340.0		30			97			95					
3		6,341.0			1/7/2022 03:01			375.0		40			129			95					
Deviation Surveys																					
Date					Description							Job									
					FINAL SURVEY																
Date					Description							Job									
10/30/2021 06:00					AS DRILL SURVEY							ODR, 10/29/2021 12:30									
Survey Data - All surveys for 24 hr reporting period																					
MD (ftKB)			Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)						
4,290.00			6.68		72.08		4,274.56		28.55		37.29		272.54		0.22						

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
4,385.00	7.65	79.68	4,368.82	28.53	40.13	284.02	1.43
4,479.00	8.80	84.59	4,461.86	29.95	41.92	297.33	1.43
4,574.00	8.51	82.90	4,555.77	31.82	43.48	311.54	0.41
4,668.00	7.49	85.18	4,648.86	33.57	44.85	324.55	1.14
4,763.00	7.20	84.34	4,743.08	35.37	45.96	336.64	0.33
4,857.00	6.45	85.11	4,836.41	37.01	46.99	347.76	0.80
4,951.00	7.02	82.50	4,929.76	38.45	48.19	358.72	0.69
5,046.00	7.58	83.26	5,023.99	39.85	49.68	370.70	0.60
5,140.00	7.10	81.43	5,117.22	41.13	51.28	382.60	0.57
5,235.00	6.82	82.27	5,211.52	42.25	52.91	393.99	0.31
5,329.00	6.90	83.67	5,304.85	43.57	54.28	405.14	0.20
5,424.00	6.77	82.34	5,399.17	44.90	55.66	416.36	0.22
5,518.00	6.26	84.13	5,492.57	46.19	56.92	426.95	0.58
5,613.00	7.50	77.21	5,586.88	47.00	58.82	438.15	1.57
5,707.00	7.33	76.80	5,680.10	47.16	61.55	449.97	0.19
5,802.00	6.92	77.63	5,774.36	47.36	64.16	461.46	0.44
5,896.00	6.27	78.90	5,867.74	47.73	66.36	472.03	0.71
5,990.00	6.96	80.45	5,961.11	48.39	68.30	482.68	0.76
6,085.00	8.14	82.22	6,055.29	49.51	70.16	495.02	1.27
6,179.00	7.66	82.74	6,148.40	50.91	71.85	507.83	0.52
6,274.00	7.06	81.71	6,242.61	52.18	73.50	519.89	0.65
6,368.00	7.32	86.87	6,335.87	53.83	74.66	531.58	0.74
6,462.00	7.33	89.74	6,429.11	56.34	75.01	543.56	0.39
6,556.00	6.94	92.55	6,522.38	59.33	74.78	555.23	0.56
6,651.00	6.58	92.76	6,616.72	62.49	74.27	566.40	0.38
6,746.00	6.56	92.56	6,711.10	65.56	73.76	577.26	0.03
6,840.00	5.69	94.08	6,804.56	68.49	73.19	587.27	0.94
6,889.00	5.60	93.83	6,853.32	69.96	72.86	592.08	0.19
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		-5,448.0			8,442.5		
267_5_SPBY_M_A1		-5,757.0			8,751.5		
268_5_SPBY_L_A1		-5,984.0			8,978.5		
ILP		-6,195.0			9,189.5		
PBHL/TD		-6,125.0			9,119.5		
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5		
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	
VILLESCAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER		ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			830-832-5619	GILBERT.ORSAK@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE		RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:536.00

Days Since RI:536.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/8/2022

Report #:6

DFS:5

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$72,439.43

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)			Field Name SPRABERRY (TREND AREA)							
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date			
Jobs															
Responsible Grp 2					Responsible Grp 3			Job Type		Start Date		End Date		Job Status	
DRL ENG - ALEXANDER LINDBLAD					AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type			Subtype					Date			Note				
MILESTONE			ESTIMATED PAD RELEASE					1/15/2022			3rd Well on 3 well Pad (1/5/22)				
TXRRC CALL			CEMENT INT					1/7/2022 15:15			Spoke with Valerie. Job # 276714				
Daily Operations															
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 6,957.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$72,439.43		Cum Field Est To Date \$1,141,003.84			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 6,921.0		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$5,917.40		Cum Mud Field Est \$10,394.68		Total AFE + Sup \$2,911,162.04	
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		Last Casing String SURFACE, 1,906.8ftKB					Next Casing String PROPOSED INTERMEDIATE, 7,006.0ftKB						
Avg Connection Gas 31.00		Avg Trip Gas 9.00		Avg Background Gas 8.00			Max Connection Gas 0.00			Max Trip Gas 31.00		Max Drill Gas 0.00			
Operations Summary TOOH T/5955', Wash and Ream T/5861', TOOH T/4500', TIH T/6278', Ream T/6320, TIH T/6957', CTCH, TOOH to BHA, L/D BHA, Shut in well, Bull head water flow, Laydown BHA, Rig up Casing crew, Run 9 5/8" casing T/ 3,800'															
Operations Next Report Period Continue to run casing T/ 6,938', circulate, pump Interm 1 cement, set pack off, and pick up 8 3/4" BHA															
Operations At Report Time Running 9 5/8" casing @3,800'															
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: Prod. Curve: Prod. Lateral:															
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	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/6,000' T/5,955'. Correct fill.				6,957.0	6,957.0				
06:15	0.25	06:30	INT, POST DRL	TOOH_NONELEV	NORMAL	Pulled tight at 5,955'. Ream thru 5,955' up to 5,861' (94'). Cleared up. Full returns.				6,957.0	6,957.0	0.25	1		
06:30	1	07:30	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/5,861' T/4,500'. Correct fill.				6,957.0	6,957.0				
07:30	1	08:30	INT, POST DRL	TIH_ELEV	NORMAL	TIH F/4,500' T/6,278'. Correct displacement.				6,957.0	6,957.0				
08:30	0.25	08:45	INT, POST DRL	TIH_NONELEV	NORMAL	Wash and ream F/6,278' T/6,320'. (42')				6,957.0	6,957.0				
08:45	0.5	09:15	INT, POST DRL	TIH_ELEV	NORMAL	TIH F/6,320' T/6,957'. Correct displacement.				6,957.0	6,957.0				
09:15	0.75	10:00	INT, POST DRL	CIRC	NORMAL	Circulate to clean hole. Lost full returns 151 Bbls left in circulation. Took 193.42 Bbls to fill annulas with 8.7 ppg reserve pit water.				6,957.0	6,957.0	0.75	2		
10:00	1.5	11:30	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/6,957' T/4,074'.				6,957.0	6,957.0				
11:30	0.5	12:00	INT, POST DRL	FLOW_CHK	NORMAL	Flow check. (Static)				6,957.0	6,957.0				
12:00	1.25	13:15	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/4,074' T/1,906'. (casing shoe)				6,957.0	6,957.0				
13:15	0.25	13:30	INT, POST DRL	FLOW_CHK	NORMAL	Flow check. Flowing 8 Bbls an hour.				6,957.0	6,957.0				
13:30	0.5	14:00	INT, POST DRL	CIRC	NORMAL	Displace surface casing annulas with 10.2 ppg drilling brine. Well is dead.				6,957.0	6,957.0				
14:00	0.25	14:15	INT, POST DRL	HDL_ROTHD	NORMAL	Pull rotating head and install trip nipple.				6,957.0	6,957.0				
14:15	0.25	14:30	INT, POST DRL	TRIP_NON_ST80	NORMAL	TOOH F/1,906' T/507' (BHA). Using rig tongs due to high torque. Hole taking more than calculated on fill ups. Continue filling with 10.0 ppg brine to reduce losses.				6,957.0	6,957.0	0.25	3		
14:30	0.25	14:45	INT, POST DRL	SFTY	NORMAL	Prejob safety meeting and JSA on laying down BHA.				6,957.0	6,957.0	0.25	3		
14:45	3	17:45	INT, POST DRL	LD_DIR	NORMAL	L/D 7 of 12 - 8" Drill Collars.Using rig tongs. Well started flowing at 22 Bbls/hr.				6,957.0	6,957.0	3.00	3		
17:45	2.25	20:00	INT, POST DRL	WELL_CTRL	WELL CONTROL	M/U crossover and stand of drill pipe. Place drill collar below rotary. Shut in and monitor casing pressure. (mixing mud cap/bullhead mud to stop flow), Bulll head well with 80bbls of 13.0ppg mud				6,957.0	6,957.0	2.25	4		
20:00	1.5	21:30	INT, POST DRL	L/D BHA	NORMAL	Lay down 5 - 8" Drill collars				6,957.0	6,957.0				
21:30	0.25	21:45	INT, POST DRL	SFTY	NORMAL	Safety meeting with Altitude Energy on laying down directional tools				6,957.0	6,957.0				
21:45	0.75	22:30	INT, POST DRL	LD_DIR	NORMAL	Lay down directional tools				6,957.0	6,957.0				

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Time Log												
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #	
22:30	0.5	23:00	INT, POST DRL	RIG_SVC	NORMAL	Clean rig floor		6,957.0	6,957.0			
23:00	0.25	23:15	INT, POST DRL	WRBSH	NORMAL	Pull wear bushing		6,957.0	6,957.0			
23:15	0.5	23:45	INT, CASE & CMT	RU_CSG	NORMAL	Rig up casing crew		6,957.0	6,957.0			
23:45	0.25	00:00	INT, CASE & CMT	SFTY	NORMAL	Safety meeting with H&P, Tenaris, and Baker Hughes		6,957.0	6,957.0			
00:00	0.75	00:45	INT, CASE & CMT	MU_SHOE_TRK	NORMAL	Make up shoe track and test floats		6,957.0	6,957.0			
00:45	5.25	06:00	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 9 5/8" casing F/ 3,800'. (Lost displacement @ 1905')		6,957.0	6,957.0			
Interval Problems												
DOWNHOLE CONDITIONS, 5,861.0ftKB, 1/7/2022 06:15												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment				
1	0.25	No	WELLBORE	TIGHT SPOT		PIONEER NATURAL RESOURCES USA INC		Pulled tight at 5,955'. Ream thru 5,955' up to 5,861' (94'). Cleared up. Full retrurns. Wash and ream F/6,278' T/6,320'. (42')				
DOWNHOLE CONDITIONS, 6,957.0ftKB, 1/7/2022 09:15												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment				
2	0.75	No	WELLBORE	LOST CIRCULATION		PIONEER NATURAL RESOURCES USA INC		Circulate to clean hole. Lost full returns 151 Bbbls left in circulation. Took 193.42 Bbbls to fill annulas with reserve pit water from trip tank.				
RIG, 0.0ftKB, 1/7/2022 14:15												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment				
3	3.50	No	PIPE HANDLING	PIPE SPINNER		HELMERICH & PAYNE INTERNATIONAL DRILLING CO		Unable to break out connections with ST-80 due to high torque.				
DOWNHOLE CONDITIONS, 399.0ftKB, 1/7/2022 17:45												
Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party		Comment				
4	2.25	No	WELL CONTROL	INFLUX		PIONEER NATURAL RESOURCES USA INC		M/U crossover and stand of drill pipe. Place drill collar below rotary. Shut in and monitor casing pressure. (mixing mud cap/bullhead mud to stop flow)				
Drill Strings												
BHA #2 , INTERMEDIATE												
Bit Run			Drill Bit			Bit Type			Make			
2			12 1/4, SPL616, 56397			PDC			ULTERRA			
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)			IADC Bit Dull			Hours Drilled By Bit (hr)			
12/12/12/11/11/11/11/11			0.91			2-2-LT-N-X-0-CT-TD			32.25			
BHA Drilling Time (hr)			BHA Depth Drilled (ft)			BHA ROP (ft/hr)			Depth In (ftKB)			
32.25			5,018.00			155.6			1,939.0			
									Depth Out (ftKB)			
									6,957.0			
Drill String Components												
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make	
176	DRILL PIPE				5	4.27	5,523.08	6,957.00	107,700.1	227	RIG	
9	HWDP				5	3.00	267.90	1,433.92	13,127.1	119	RIG	
1	DRILLING JARS - HYDRAULIC				6 3/4	2.56	30.10	1,166.02	2,709.0	106	KNIGHT OIL TOOLS LLC	
21	HWDP				5	3.00	628.41	1,135.92	30,792.1	104	RIG	
1	SUB - XO				5	3.00	3.30	507.51	247.5	73	RIG	
12	DRILL COLLAR - SPIRALED				8	2.88	353.52	504.21	51,967.4	72	Rig	
1	SUB - XO				8	2.81	3.64	150.69	273.0	21	STABIL DRILL	
1	SUB - SHOCK				8 1/16	3.50	32.08	147.05	5,132.8	20	SCOUT	
1	STABILIZER				8 1/4	2.88	7.25	114.97	1,000.5	15	STABIL DRILL	
1	DRILL COLLAR - NON MAG				8 1/8	3.75	30.59	107.72	4,374.4	14	STABIL DRILL	
1	MWD TOOL - RETRIEVABLE				8	3.75	29.30	77.13	2,637.0	10	STABIL DRILL	
1	SUB - UBHO				8	3.50	3.13	47.83	447.6	7	GORDON	
1	STABILIZER				8 1/4	2.81	7.53	44.70	1,039.1	7	STABIL DRILL	
1	MOTOR - STABILIZER SLEEVE				9 5/8	3.00	35.67	37.17	5,600.2	6	ALTITUDE ENERGY PARTNERS	
Mud Motors												
SN			Bend Angle		Bearing Type			Lobe Config		# Stages	Lwr Defln Type	Bit To Bend
AEP9002			1.75		NOT SEALED			7:8		5.9		8.35
Sensors												
Sensor Type				Sensor-Bit (ft)				Note				
GAMMA				55.73								
DIRECTIONAL				68.00								
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)		

Job Supply Amounts									
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed	
DIESEL	MUD	GAL		0			25,717	0	
WATER	FRESH	BBL	0	0		Meter reading 65,518	0	8617	
DIESEL	FUEL	GAL		1512			17,499	10646	
Mud Additive Amounts									
Des			Type		Units	Rec	Consumed	On Loc	Cum Cons
BARITE-BULK			WEIGHTING MATERIAL		TON	19	25	35.0	25
BCI ZC 1500 H2S SCAVENGER			SPECIALTY		GAL		1	2.0	2
XANTHAN GUM			VISCOSIFIER		SACK		8	75.0	19
WC DEFOAMER			DEFOAMER		GAL		4	10.0	22
Pump Operations									
Pump #	Make		Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER		PZ-11	5 1/2	10.98	0.081		6,000.0	
2	GARDNER-DENVER		PZ-11	5 1/2	10.98	0.081		6,000.0	
3	GARDNER-DENVER		PZ-11	5 1/2	10.98	0.081		6,000.0	
Pump Checks									
Pump #	Depth (ftKB)		Time	P (psi)	Strokes (spm)	Q Flow (gpm)		Eff (%)	
No Data									
Deviation Surveys									
Date 10/30/2021 06:00			Description AS DRILL SURVEY			Job ODR, 10/29/2021 12:30			
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)	
267_0_SPBY_U_A1/267_0_SPBY		-5,448.0			8,442.5				
267_5_SPBY_M_A1		-5,757.0			8,751.5				
268_5_SPBY_L_A1		-5,984.0			8,978.5				
ILP		-6,195.0			9,189.5				
PBHL/TD		-6,125.0			9,119.5				
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5				
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		
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM		
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM		
COX, BRYAN, ENGINEER			ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM		
ORSAK, GILBERT, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			830-832-5619	GILBERT.ORSAK@PXD.COM		
CASTILLO, FERNANDO, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM		
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM		
RIG-H&P 645, RIG PHONE			RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM		
Personnel Log									
Company								Count	
PIONEER NATURAL RESOURCES USA INC								2	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO								13	
PIONEER NATURAL RESOURCES USA INC								1	
ALTITUDE ENERGY PARTNERS INC								3	
KAYDEN INDUSTRIES USA INC								1	
STRATAGRAPH INC								2	
TCI CASING SPECIALTIES LLC								4	
TENARIS GLOBAL SERVICES USA								2	
BAKER HUGHES OILFIELD OPERATIONS INC									

H & P 645	
Accept:	1/5/2022
Release:	
Days Since LTI:	537.00
Days Since RI:	537.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	1/9/2022
Report #:	7
DFS:	6
AFE #:	9017696
Total AFE + Sup:	\$2,911,162.04
Daily Field Est. (Cost):	\$176,459.78

42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)			Field Name SPRABERRY (TREND AREA)				
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50	Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date	
Jobs												
Responsible Grp 2					Responsible Grp 3		Job Type	Start Date		End Date	Job Status	
DRL ENG - ALEXANDER LINDBLAD					AREA TEAM 1		ODR	10/29/2021 12:30			IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)												
Type		Subtype				Date		Note				
MILESTONE		ESTIMATED PAD RELEASE				1/15/2022		3rd Well on 3 well Pad (1/5/22)				
Daily Operations												
Footage/Meterage (ft) 60.00		Drilling Hours 0.50		% Rotating Time 100.00		End Depth (ftKB) 7,027.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$176,459.78		Cum Field Est To Date \$1,317,463.62
24 HR ROP (ft/hr) 120.0	Circulating Hours	% Sliding Time 0.00		End Depth (TVD) (ftKB) 6,990.7		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$220.00		Cum Mud Field Est \$10,614.68		Total AFE + Sup \$2,911,162.04
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 0.0			Daily Goal - Next 24 1,800.0			Goal Comments Goal met		
Backbuild Yes	Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB					Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB				
Avg Connection Gas 0.00		Avg Trip Gas 12.00		Avg Background Gas 12.00			Max Connection Gas 0.00		Max Trip Gas 24.00		Max Drill Gas 0.00	
Operations Summary Run Casing, Land out, R/D Casing Crew, R/U Cementers, Circulate casing volume due to losses, Cement 1st stage per program, Set pack off, Make up directional tools, TIH T/ 4,887', Test casing for 10 mins with 2,500 psi, Drill out plug, TIH T/ 6,846', Test casing for 30 mins with 2,500 psi, Drill out shoe track T/ 6,936', Drill 10' new formation, Perform FIT to 10.0 EMW, Drill production vertical @ 7,027'												
Operations Next Report Period Drilling Production Vertical and and build curve.												
Operations At Report Time Drilling 8 3/4" production @ 7,027'												
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: Prod. Curve: Prod. Lateral:												
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	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 9 5/8" casing F/ 3,800' T/6,909'. P/U Landing joint and land out @ 6,938'. (Lost displacement @ 1905')			6,957.0	6,957.0		
11:00	0.5	11:30	INT, CASE & CMT	RD_CSG	NORMAL	R/D casing crew.			6,957.0	6,957.0		
11:30	0.5	12:00	INT, CASE & CMT	RU_CMT	NORMAL	R/U cement head.			6,957.0	6,957.0		
12:00	1.25	13:15	INT, CASE & CMT	CIRC	NORMAL	Circulate casing capacity due to complete loss of returns. Total volume pumped 530 Bbls.			6,957.0	6,957.0		
13:15	0.25	13:30	INT, CASE & CMT	SFTY	NORMAL	Prejob safety meeting and JSA on cement job.			6,957.0	6,957.0		
13:30	4	17:30	INT, CASE & CMT	CMT	NORMAL	Cement 1st stage per Pioneer program as follows: Flush 10 Bbls fresh water. Test lines to 5,000 psi. Mix and pump 50 Bbls 11.0 ppg mud push. Mix and pump 631 Bbls 11.0 ppg lead cement. Mix and pump 62 Bbls 14.8 ppg tail cement. Drop plug. Wash up. Displace with 180 Bbls fresh water followed with 340 Bbls brine above DV. Plug bumped as calculated. Floats held. Open ACP. Drop cancelation cone. Pressure up to 2500 psi. Bled off. (300 ppm H2S recorded. All returns to reserve pit.No exposure)			6,957.0	6,957.0		
17:30	0.5	18:00	INT, CASE & CMT	RD_CMT	NORMAL	R/D cementers.			6,957.0	6,957.0		
18:00	2	20:00	INT, CASE & CMT	WH	NORMAL	Laydown landing joint, set pack off, and test			6,957.0	6,957.0		
20:00	0.5	20:30	PROD, PRE DRL	WRBSH	NORMAL	Install wear bushing			6,957.0	6,957.0		
20:30	0.25	20:45	PROD, PRE DRL	SFTY	NORMAL	Safety meeting with Altitude Energy on picking up directional tools			6,957.0	6,957.0		
20:45	1	21:45	PROD, PRE DRL	PU_DIR	NORMAL	Pick up 8 3/4" directional tools			6,957.0	6,957.0		
21:45	2.25	00:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/ 95' T/ 4,891'. With proper displacement			6,957.0	6,957.0		
00:00	0.25	00:15	PROD, PRE DRL	CIRC	NORMAL	Fill pipe and circulate			6,957.0	6,957.0		
00:15	0.25	00:30	PROD, PRE DRL	CSG_TEST	NORMAL	Test casing to 2,500 psi for 10 mins. good test			6,957.0	6,957.0		
00:30	0.25	00:45	PROD, PRE DRL	DRL_OUT	NORMAL	Drill out cancelation plug @ 4,891'			6,957.0	6,957.0		
00:45	1.25	02:00	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/ 4,891' T/ 6,846' with proper displacement			6,957.0	6,957.0		
02:00	0.5	02:30	PROD, PRE DRL	CSG_TEST	NORMAL	Test casing to 2,500 psi for 30 mins. good test			6,957.0	6,957.0		
02:30	1.5	04:00	PROD, PRE DRL	DRL_OUT	NORMAL	Drill out shoe track F/ 6,846' T/ 6,936 while displacing to 8.2 ppg OBM			6,957.0	6,957.0		
04:00	0.25	04:15	PROD, PRE DRL	DRL	NORMAL	Drilliing 10' new formation T/ 6,967'			6,957.0	6,967.0		
04:15	0.25	04:30	PROD, PRE DRL	CIRC	NORMAL	Circulate a bottoms up for FIT			6,967.0	6,967.0		
04:30	0.5	05:00	PROD, PRE DRL	FIT	NORMAL	Perform FIT to a 10.0 EMW			6,967.0	6,967.0		
05:00	0.5	05:30	PROD, DRL	HDL_ROTHD	NORMAL	Change out rotating head element.			6,967.0	6,967.0		
05:30	0.5	06:00	PROD, DRL	DRL	NORMAL	Drilling Interm F/6,967' T/7,027' (60' @ 120 '/hr) WOB 35, RPM 20, GPM 550, SPP 1850, DIFF 400 , torq 15k			6,967.0	6,967.0		
Drill Strings												

BHA #3 , INTERMEDIATE 2																		
Bit Run			Drill Bit						Bit Type				Make					
3			8 3/4, SPL613, 56708						PDC				ULTERRA					
Nozzles (1/32")			Bit Total Fluid Area (nozzles) (in²)						IADC Bit Dull				Hours Drilled By Bit (hr)				Depth Drilled By Bit (ft)	
10/10/10/10/11/11/11/11			0.77						-----				0.50				60.00	
BHA Drilling Time (hr)			BHA Depth Drilled (ft)			BHA ROP (ft/hr)			Depth In (ftKB)			Depth Out (ftKB)						
0.50			60.00			120.0			6,967.0			7,027.0						
Drill String Components																		
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make									
130	DRILL PIPE		5	4.27	5,762.10	7,027.00	112,361.0	180	RIG									
39	HWDP		5	3.00	1,169.73	1,264.90	57,316.8	67	RIG									
1	DRILL COLLAR - NON MAG		6 3/4	3.25	29.88	95.17	2,778.8	10	STABIL DRILL									
1	MWD TOOL - RETRIEVABLE		6 5/8	3.25	28.54	65.29	2,654.2	7	STABIL DRILL									
1	SUB - UBHO		6 3/4	2.50	3.70	36.75	925.0	5	GORDON									
1	MOTOR - SLICK SLEEVE		6 5/8	3.00	32.05	33.05	3,781.9	4	ALTITUDE ENERGY PARTNERS									
Mud Motors																		
SN		Bend Angle	Bearing Type			Lobe Config		# Stages	Lwr Defln Type			Bit To Bend						
AEP7019		2.12	NOT SEALED			6:7		6.5				4.05						
Sensors																		
Sensor Type			Sensor-Bit (ft)					Note										
GAMMA			44.60															
DIRECTIONAL			57.00															
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	6,967.0	60.00	120.0	35	20	400.0	550	1,850.0	120.0	210	220	200	210	5.0	4.0		
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)		
8.20		8.54	124.9		2.1	228.9	389.3	15.4		434.9		113.19		4.03		356.87		
Mud Checks																		
Time		Mud Company				Type		Depth (ftKB)		Density (lb/gal)		Funnel Viscosity (s/qt)			T Flowline (° F)			
1/8/2022 22:00		PIONEER DRILLING FLUIDS				OIL BASE		6,957.0		8.20		58			0.0			
pV (cP)		YP (lb/100ft²)		Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)			HTHP Filtrate (mL/30min)			HTHP Temperature (° F)		HTHP Pressure (psi)				
11.0		11.000		6	7				15.0			200.0		500.0				
Solids (%)			Low Gravity Solids (%)				Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)			
6.0			4.7															
Chlorides (mg/L)			Calcium (mg/L)			CaCl (ppm)		Oil Water Ratio			Electric Stab (V)			Lime (lb/bbl)		pH		
17,000			8,000.000			0		78.7/21.3			589.0			1.6				
Gel 10 sec (lb/100ft²)						Gel 10 min (lb/100ft²)						Gel 30 min (lb/100ft²)						
11.000						19.000						21.000						
Comment																		
No treatments to active system while running casing and TIH.																		
Last BOP Test																		
Date	Test Type	Item Tested	Next Test Date	Com														
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.														
Leak Off and Formation Integrity Tests																		
Test Type									Depth (ftKB)			Dens Fluid (lb/gal)						
FORMATION INTEGRITY									1,906.0			12.48						
FORMATION INTEGRITY									6,938.0			10.03						
Casing Pressure Test																		
Test Type	Test Subtype		Date			Item Tested					Failed?	Time (min)		P (psi)				
CASING	STANDARD		11/3/2021 12:00			SURFACE, 1,906.8ftKB					No	30.00		1,000.0				
CASING	STANDARD		1/8/2022 02:00			INTERMEDIATE, 6,938.7ftKB					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		106.5						20	H40	78.67								
SURFACE		1,906.8			1,906.6			13 3/8	J55	54.50		BTC		1,235.1				
INTERMEDIATE		6,938.7			6,902.8			9 5/8	L80-IC	40.00		BTC		3,598.0				
Cement																		
INTERMEDIATE CASING CEMENT casing 1/8/2022 13:30																		
Cmtg End Date				Wellbore				Technical Result						Comment				
1/8/2022 17:30				ORIGINAL				SUCCESS										
Cement Stages																		
Description		Final Top Depth			Btm (ftKB)		Top Pl...		Btm Pl...									
		29.0			6,939.0		Yes											
Q Pump Init		Q Pump Final			Q Pump Avg		P Pump Final		P Plug Bump		Float	Recip?	Rotated?					
6		3			5		900.0		1,400.0		No	No	No					
Cement Fluids																		
Fluid Type		Estimated Top (ftKB)			Estimated Bottom (ftKB)			Class		Yield (ft³/sack)		Density (lb/gal)						
MUDPUSH		0.0			0.0							10.70						
Fluid Type		Estimated Top (ftKB)			Estimated Bottom (ftKB)			Class		Yield (ft³/sack)		Density (lb/gal)						
LEAD CMT		0.0			5,935.0			TXI LITEWEIGHT		2.77		11.00						
Fluid Type		Estimated Top (ftKB)			Estimated Bottom (ftKB)			Class		Yield (ft³/sack)		Density (lb/gal)						
TAIL CMT		5,953.0			6,939.0			CLASS C		1.33		14.80						
Fluid Type		Estimated Top (ftKB)			Estimated Bottom (ftKB)			Class		Yield (ft³/sack)		Density (lb/gal)						
DSPLMT		0.0			6,850.0							10.20						
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		774					16,725		11420						
DIESEL		MUD	GAL		0					25,717		0						
WATER		FRESH	BBL	0	0		Meter reading 65,518			0		8617						
Mud Additive Amounts																		
Des		Type				Units	Rec	Consumed		On Loc		Cum Cons						
SHRINK WRAP		SERVICE				EA	12	12		12.0		12						
PALLETES		MISCELLANEOUS				EA	10	10		0.0		10						

Pump Operations						
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0
2	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0
3	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0
Pump Checks						
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
No Data						
Deviation Surveys						
Date		Description		Job		
10/30/2021 06:00		AS DRILL SURVEY		ODR, 10/29/2021 12:30		
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)	
267_0_SPBY_U_A1/267_0_SPBY	-5,448.0		8,442.5			
267_5_SPBY_M_A1	-5,757.0		8,751.5			
268_5_SPBY_L_A1	-5,984.0		8,978.5			
ILP	-6,195.0		9,189.5			
PBHL/TD	-6,125.0		9,119.5			
268_6_SPBY_L_B1/JO MILL	-6,263.0		9,257.5			
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	
VILLESICAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESICAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER		ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		830-832-5619	GILBERT.ORSAK@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE		RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log						
Company						Count
PIONEER NATURAL RESOURCES USA INC						2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO						13
PIONEER NATURAL RESOURCES USA INC						1
ALTITUDE ENERGY PARTNERS INC						3
KAYDEN INDUSTRIES USA INC						1
STRATAGRAPH INC						2

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 538.00

Days Since RI: 538.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/10/2022

Report #: 8

DFS: 7

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$84,209.67

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL			Open Formation LOWER SPRABERRY A3 (SPBY L A3)				Field Name SPRABERRY (TREND AREA)							
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50			Ground Elevation (ft) 2,968.00			Spud Date 10/29/2021		TD Date			
Jobs																	
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date			End Date		Job Status	
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30					IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)																	
Type			Subtype						Date			Note					
MILESTONE			ESTIMATED PAD RELEASE						1/15/2022			3rd Well on 3 well Pad (1/5/22)					
Daily Operations																	
Footage/Meterage (ft) 1,713.00			Drilling Hours 23.50		% Rotating Time 58.16		End Depth (ftKB) 8,740.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$84,209.67			Cum Field Est To Date \$1,401,673.29			
24 HR ROP (ft/hr) 72.9		Circulating Hours		% Sliding Time 41.84		End Depth (TVD) (ftKB) 8,702.2		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$10,169.19			Cum Mud Field Est \$20,783.87		Total AFE + Sup \$2,911,162.04		
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 1,800.0			Daily Goal - Next 24 400.0			Goal Comments Goal not met due to low ROP in curve							
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB							
Avg Connection Gas 157.00			Avg Trip Gas 12.00		Avg Background Gas 142.00			Max Connection Gas 336.00			Max Trip Gas 16.00		Max Drill Gas 367.00				
Operations Summary																	
Drill Production Vertical F/ 7,027' T/8,619, Drill Production Curve F/8,619 T/8,740' (100% sliding, Inc. 1.05°, BRN 10°, 14.83' high, 9.42' left)																	
Operations Next Report Period																	
Drilling Production Curve T/ 9,140' per well plan #2																	
Operations At Report Time																	
Drilling 8 3/4" Production Curve @ 8,740'																	
Remarks																	
Surf: 100%																	
Int. 1: 100%																	
Prod. Vert.: 100%																	
Prod. Curve: 13%																	
Prod. Lateral:																	
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	12	18:00	PROD, DRL		DRL	NORMAL	Drilling Production Vertical F/7,027' T/8,158 (1,191' @ 99 '/hr) WOB 35, RPM 20 - 35, GPM 550, SPP 2675, DIFF 427, torq 8k				6,967.0	8,158.0					
18:00	0.5	18:30	PROD, DRL		RIG_SVC	NORMAL	Rig service and drops inspection.				8,158.0	8,158.0					
18:30	3	21:30	PROD, DRL		DRL	NORMAL	Drilling Production Vertical F/8,158' T/8,619, (KOP) (461' @ 153 '/hr) WOB 35, RPM 35, GPM 550, SPP 2780, DIFF 540, torq 8k				8,158.0	8,619.0					
21:30	8.5	06:00	PROD, DRL CURVE		DRL	NORMAL	Drilling Production Curve F/8,619' T/8,740, (121' @ 14 '/hr) WOB 8, RPM 0, GPM 650, SPP 2900, DIFF 150, torq 3k				8,619.0	8,740.0					
Drill Strings																	
BHA #3 , INTERMEDIATE 2																	
Bit Run 3					Drill Bit 8 3/4, SPL613, 56708					Bit Type PDC			Make ULTERRA				
Nozzles (1/32") 10/10/10/10/11/11/11/11/11					Bit Total Fluid Area (nozzles) (in²) 0.77			IADC Bit Dull -----			Hours Drilled By Bit (hr) 24.00		Depth Drilled By Bit (ft) 1,773.00				
BHA Drilling Time (hr) 24.00					BHA Depth Drilled (ft) 1,773.00			BHA ROP (ft/hr) 73.9			Depth In (ftKB) 6,967.0		Depth Out (ftKB) 8,740.0				
Drill String Components																	
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make						
238	DRILL PIPE				5	4.27	7,475.10	8,740.00	145,764.5	213	RIG						
39	HWDP				5	3.00	1,169.73	1,264.90	57,316.8	67	RIG						
1	DRILL COLLAR - NON MAG				6 3/4	3.25	29.88	95.17	2,778.8	10	STABIL DRILL						
1	MWD TOOL - RETRIEVABLE				6 5/8	3.25	28.54	65.29	2,654.2	7	STABIL DRILL						
1	SUB - UBHO				6 3/4	2.50	3.70	36.75	925.0	5	GORDON						
1	MOTOR - SLICK SLEEVE				6 5/8	3.00	32.05	33.05	3,781.9	4	ALTITUDE ENERGY PARTNERS						
Mud Motors																	
SN		Bend Angle			Bearing Type			Lobe Config		# Stages		Lwr Defln Type			Bit To Bend		
AEP7019		2.12			NOT SEALED			6:7		6.5					4.05		
Sensors																	
Sensor Type					Sensor-Bit (ft)					Note							
GAMMA					44.60												
DIRECTIONAL					57.00												
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	07:45	7,027.0	101.00	57.7	35	35	500.0	550	2,700.0	57.7	207	218	194	207	9,000.0	5,000.0	0
07:45	08:20	7,128.0	15.00	25.7	35	0	300.0	550	2,500.0	25.7	207	218	194	207	0.0	5,000.0	210
08:20	13:30	7,143.0	553.00	107.0	35	35	500.0	550	2,700.0	107.0	207	218	194	207	9,000.0	5,000.0	0
13:30	13:55	7,696.0	9.00	21.6	35	0	300.0	550	2,500.0	21.6	207	218	194	207	0.0	5,000.0	345
13:55	16:20	7,705.0	275.00	113.8	35	35	500.0	550	2,700.0	113.8	207	218	194	207	9,000.0	5,000.0	0
16:20	16:40	7,980.0	8.00	24.0	35	0	300.0	550	2,500.0	24.0	207	218	194	207	0.0	5,000.0	80
16:40	18:00	7,988.0	170.00	127.5	35	35	500.0	550	2,700.0	127.5	207	218	194	207	9,000.0	5,000.0	0
18:30	21:30	8,158.0	461.00	153.7	35	35	500.0	550	2,700.0	17.1	207	218	194	207	9,000.0	5,000.0	0
21:30	00:00	8,619.0	34.00	13.6	35	0	300.0	650	2,500.0	13.6	207	218	194	207	0.0	5,000.0	166
00:00	06:00	8,653.0	87.00	14.5	35	0	300.0	550	2,700.0	14.5	207	218	194	207	0.0	5,000.0	166

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)
8.10	8.45	123.4		2.1	228.9	384.5	15.4	434.9	143.53	89.70	357.00
Mud Checks											
Time 1/9/2022 23:50		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 8,650.0	Density (lb/gal) 8.10	Funnel Viscosity (s/qt) 61		T Flowline (° F) 105.0	
pV (cP) 12.0	YP (lb/100ft²) 10.000	Vis 3rpm 7	Vis 6rpm 8	Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 14.0		HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0	
Solids (%) 5.0		Low Gravity Solids (%) 3.6			Sand (%)		MBT (lb/bbl)		Pm (mL/mL)	Pf (mL/mL)	
Chlorides (mg/L) 22,000		Calcium (mg/L) 8,000.000		CaCl (ppm) 0		Oil Water Ratio 74.2/25.8		Electric Stab (V) 647.0		Lime (lb/bbl) 1.9	pH
Gel 10 sec (lb/100ft²) 11.000				Gel 10 min (lb/100ft²) 18.000				Gel 30 min (lb/100ft²) 21.000			
Comment Maintain MW 8.0-8.2 ppg. Treatment in active: 2.35 ppb Lime, .47 ppb Soltex, 1.17ppb Gilsonite GP, 3.29 ppb calcium chloride, 1.13 ppb rheomod, .75ppb primary, .75 ppb secondary and 1.88 ppb bentone.											
Last BOP Test											
Date	Test Type	Item Tested	Next Test Date	Com							
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.							
Leak Off and Formation Integrity Tests											
Test Type					Depth (ftKB)			Dens Fluid (lb/gal)			
FORMATION INTEGRITY					1,906.0			12.48			
FORMATION INTEGRITY					6,938.0			10.03			
Casing Pressure Test											
Test Type	Test Subtype	Date		Item Tested				Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/3/2021 12:00		SURFACE, 1,906.8ftKB				No	30.00	1,000.0	
CASING	STANDARD	1/8/2022 02:00		INTERMEDIATE, 6,938.7ftKB				No	30.00	2,500.0	
CASING	STANDARD	1/9/2022 00:15		INTERMEDIATE, 6,938.7ftKB				No	10.00	2,500.0	
Kick Offs & Key Depths											
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
1/9/2022 21:30			KICK OFF		8,619.0			8,582.2			
Casing Strings											
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR		106.5				20	H40	78.67			
SURFACE		1,906.8		1,906.6		13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE		6,938.7		6,902.8		9 5/8	L80-IC	40.00	BTC	3,598.0	
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		9500				16,217	9500	
DIESEL		FUEL	GAL		2131				14,594	13551	
WATER		FRESH	BBL	3544	3544		Meter reading 69,062		0	12161	
Mud Additive Amounts											
Des				Type			Units	Rec	Consumed	On Loc	Cum Cons
BCI OBM PRIMARY				OIL MUD ADDITIVE			GAL	8	2	8.0	2
BCI OBM SECONDARY				OIL MUD ADDITIVE			GAL	5	2	8.0	2
BCI OBM RHEO MODIFIER				OIL MUD ADDITIVE			GAL		3	6.0	3
BENTONE 910				OIL MUD ADDITIVE			SACK		20	100.0	20
BENTONE 990				OIL MUD ADDITIVE			SACK		20	100.0	20
CALCIUM CHORIDE-POWDER				SALT			SACK	200	70	220.0	70
GILSOCOL GP				SPECIALITY			SACK		25	75.0	25
LIME				ALKALINITY CONTROL			SACK		50	300.0	100
SOLTEX				FLUID LOSS ADDITIVES			SACK	25	10	30.0	10
Pump Operations											
Pump #	Make			Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
2	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
3	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
Pump Checks											
Pump #	Depth (ftKB)		Time		P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)	
1	8,619.0		1/10/2022 04:38		440.0	30		97		95	
1	8,619.0		1/10/2022 04:38		490.0	40		129		95	
1	8,619.0		1/10/2022 04:38		525.0	50		161		95	
3	8,619.0		1/10/2022 04:39		390.0	30		97		95	
3	8,619.0		1/10/2022 04:39		440.0	40		129		95	
3	8,619.0		1/10/2022 04:39		500.0	50		161		95	
Deviation Surveys											
Date 10/30/2021 06:00				Description AS DRILL SURVEY				Job ODR, 10/29/2021 12:30			
Survey Data - All surveys for 24 hr reporting period											
MD (ftKB)		Incl (°)	Azm (°)		TVD (ftKB)		VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
7,064.00		5.15	95.14		7,027.60		74.93	71.59	607.84	0.16	
7,159.00		1.68	98.48		7,122.42		76.84	71.01	613.46	3.66	
7,253.00		1.19	87.96		7,216.39		77.56	70.84	615.80	0.59	
7,348.00		1.09	102.13		7,311.37		78.15	70.68	617.67	0.31	
7,442.00		0.50	128.77		7,405.36		78.87	70.24	618.87	0.72	
7,537.00		0.57	155.11		7,500.36		79.66	69.55	619.39	0.27	
7,631.00		0.80	157.03		7,594.35		80.77	68.52	619.84	0.25	
7,725.00		1.67	305.71		7,688.34		80.37	68.72	618.98	2.54	
7,820.00		1.51	277.38		7,783.31		78.87	69.69	616.62	0.84	
7,914.00		1.60	277.49		7,877.27		77.95	70.02	614.09	0.10	
8,009.00		1.02	340.41		7,972.25		76.63	70.99	612.49	1.53	
8,103.00		0.50	18.66		8,066.24		75.45	72.16	612.34	0.74	
8,198.00		0.52	24.05		8,161.24		74.76	72.95	612.65	0.05	
8,292.00		0.38	152.64		8,255.24		74.72	73.06	612.97	0.87	
8,387.00		0.63	148.70		8,350.23		75.53	72.34	613.38	0.27	
8,481.00		0.84	166.75		8,444.23		76.71	71.22	613.81	0.33	

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
8,576.00	1.05	200.25	8,539.21	78.13	69.73	613.67	0.61
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
267_5_SPBY_M_A1	-5,757.0			8,751.5			
268_5_SPBY_L_A1	-5,984.0			8,978.5			
ILP	-6,195.0			9,189.5			
PBHL/TD	-6,125.0			9,119.5			
268_6_SPBY_L_B1/JO MILL	-6,263.0			9,257.5			
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	
VILLESCAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER		ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			830-832-5619	GILBERT.ORSAK@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE		RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:539.00

Days Since RI:539.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/11/2022

Report #:9

DFS:8

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$140,328.75

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL			Open Formation LOWER SPRABERRY A3 (SPBY L A3)				Field Name SPRABERRY (TREND AREA)											
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50			Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date								
Jobs																					
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status						
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS						
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																					
Type			Subtype						Date		Note										
MILESTONE			ESTIMATED PAD RELEASE						1/15/2022		3rd Well on 3 well Pad (1/5/22)										
Daily Operations																					
Footage/Meterage (ft) 364.00			Drilling Hours 24.00		% Rotating Time 1.04		End Depth (ftKB) 9,104.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$140,328.75		Cum Field Est To Date \$1,542,072.04								
24 HR ROP (ft/hr) 15.2		Circulating Hours		% Sliding Time 98.96		End Depth (TVD) (ftKB) 9,009.2		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$6,751.63		Cum Mud Field Est \$27,535.50		Total AFE + Sup \$2,911,162.04							
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 400.0			Daily Goal - Next 24 400.0			Goal Comments Goal not met due to low ROP in curve											
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB											
Avg Connection Gas 62.00			Avg Trip Gas 0.00		Avg Background Gas 54.00			Max Connection Gas 67.00			Max Trip Gas 0.00		Max Drill Gas 108.00								
Operations Summary Drill Production Curve F/8,740' T/9,104' (100% sliding, Inc. 44.37°, BRN 9.28°, MY: 10.8°, 40.80' high, 4.82' leftt)																					
Operations Next Report Period Drill production Curve T/ 9,550 +/-, Drill production lateral, Ciculate hole clean, and back ream curve																					
Operations At Report Time Drilling 8 3/4" Production Curve @ 9,104'																					
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 52% Prod. Lateral:																					
Time Log																					
Start Time	Dur (hr)	End Time	Phase		Operation	Ops Category	Com				Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #					
06:00	24	06:00	PROD, DRL CURVE		DRL	NORMAL	Drilling Production Curve F/8,740' T/9,104', (364' @ 15 'hr) WOB 8, RPM 0, GPM 650, SPP 3000, DIFF 200, torq 3k				8,740.0		9,140.0								
Drill Strings																					
BHA #3 , INTERMEDIATE 2																					
Bit Run 3				Drill Bit 8 3/4, SPL613, 56708						Bit Type PDC			Make ULTERRA								
Nozzles (1/32") 10/10/10/10/11/11/11/11				Bit Total Fluid Area (nozzles) (in²) 0.77			IADC Bit Dull -----			Hours Drilled By Bit (hr) 48.00			Depth Drilled By Bit (ft) 2,137.00								
BHA Drilling Time (hr) 48.00				BHA Depth Drilled (ft) 2,137.00			BHA ROP (ft/hr) 44.5			Depth In (ftKB) 6,967.0			Depth Out (ftKB) 9,104.0								
Drill String Components																					
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make										
249	DRILL PIPE			5	4.27	7,839.10	9,104.00	152,862.5	220		RIG										
39	HWDP			5	3.00	1,169.73	1,264.90	57,316.8	67		RIG										
1	DRILL COLLAR - NON MAG			6 3/4	3.25	29.88	95.17	2,778.8	10		STABIL DRILL										
1	MWD TOOL - RETRIEVABLE			6 5/8	3.25	28.54	65.29	2,654.2	7		STABIL DRILL										
1	SUB - UBHO			6 3/4	2.50	3.70	36.75	925.0	5		GORDON										
1	MOTOR - SLICK SLEEVE			6 5/8	3.00	32.05	33.05	3,781.9	4		ALTITUDE ENERGY PARTNERS										
Mud Motors																					
SN			Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type		Bit To Bend							
AEP7019			2.12		NOT SEALED			6:7		6.5				4.05							
Sensors																					
Sensor Type				Sensor-Bit (ft)					Note												
GAMMA				44.60																	
DIRECTIONAL				57.00																	
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	22:15	8,740.0	234.00	14.4	35	0	200.0	650	3,000.0	14.4	207	218	194	207	0.0	5,000.0	0				
22:15	22:30	8,974.0	10.00	40.0	35	35	500.0	650	3,000.0	40.0	207	218	194	207	13,000.0	5,000.0	0				
22:30	00:00	8,984.0	14.00	9.3	35	0	200.0	650	3,000.0	9.3	207	218	194	207	0.0	5,000.0	0				
00:00	06:00	8,998.0	106.00	17.7	35	0	200.0	650	3,000.0	17.7	207	218	194	207	0.0	5,000.0	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)	
8.00		8.19		201.1		3.3		270.5		530.4		18.2		513.9		149.97		107.93		357.00	
Mud Checks																					
Time 1/10/2022 23:59			Mud Company PIONEER DRILLING FLUIDS					Type OIL BASE		Depth (ftKB) 8,994.0		Density (lb/gal) 8.00		Funnel Viscosity (s/qt) 58		T Flowline (° F) 106.0					
pV (cP) 12.0		YP (lbf/100ft²) 10.000		Vis 3rpm 7		Vis 6rpm 8		Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 13.0		HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0							
Solids (%) 4.5			Low Gravity Solids (%) 2.9					Sand (%)		MBT (lb/bbl)			Pm (mL/mL)			Pf (mL/mL)					
Chlorides (mg/L) 22,000			Calcium (mg/L) 6,000.000			CaCl (ppm) 0			Oil Water Ratio 75.4/24.6			Electric Stab (V) 694.0			Lime (lb/bbl) 3.6			pH			
Gel 10 sec (lbf/100ft²) 12.000						Gel 10 min (lbf/100ft²) 18.000						Gel 30 min (lbf/100ft²) 22.000									

Mud Checks								
Comment								
Maintain MW 8.0-8.2 ppg. Treatment in active: 2.67 ppb Lime, .44 ppb Soltex, .89 ppb Gilsonite GP, 1.33 ppb calcium chloride, .35 ppb rheomod, .35 ppb primary, .35 ppb secondary and 1.78 ppb bentone.								
Last BOP Test								
Date	Test Type	Item Tested	Next Test Date	Com				
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.				
Leak Off and Formation Integrity Tests								
Test Type			Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY			1,906.0		12.48			
FORMATION INTEGRITY			6,938.0		10.03			
Casing Pressure Test								
Test Type	Test Subtype	Date	Item Tested		Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/3/2021 12:00	SURFACE, 1,906.8ftKB		No	30.00	1,000.0	
CASING	STANDARD	1/8/2022 02:00	INTERMEDIATE, 6,938.7ftKB		No	30.00	2,500.0	
CASING	STANDARD	1/9/2022 00:15	INTERMEDIATE, 6,938.7ftKB		No	10.00	2,500.0	
Kick Offs & Key Depths								
Date	Type		Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
1/9/2022 21:30	KICK OFF		8,619.0		8,582.2			
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.5		20	H40	78.67			
SURFACE	1,906.8	1,906.6	13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE	6,938.7	6,902.8	9 5/8	L80-IC	40.00	BTC	3,598.0	
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	14393	11600			19,010	21100
DIESEL	FUEL	GAL	7308	2524			19,378	16075
WATER	FRESH	BBL	2918	2918		Meter reading 71,980	0	15079
Mud Additive Amounts								
Des		Type	Units	Rec	Consumed	On Loc	Cum Cons	
BCI OBM PRIMARY		OIL MUD ADDITIVE	GAL		1	7.0	3	
BCI OBM SECONDARY		OIL MUD ADDITIVE	GAL		1	7.0	3	
BENTONE 910		OIL MUD ADDITIVE	SACK		20	80.0	40	
BENTONE 990		OIL MUD ADDITIVE	SACK		20	80.0	40	
CALCIUM CHORIDE-POWDER		SALT	SACK		30	190.0	100	
GILSOCOL GP		SPECIALITY	SACK		20	55.0	45	
LIME		ALKALINITY CONTROL	SACK		60	240.0	160	
SOLTEX		FLUID LOSS ADDITIVES	SACK		10	20.0	20	
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
2	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
3	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)		Eff (%)	
No Data								
Deviation Surveys								
Date		Description			Job			
10/30/2021 06:00		AS DRILL SURVEY			ODR, 10/29/2021 12:30			
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
8,812.00	21.61	153.55	8,769.46	122.81	28.33	632.49	8.86	
8,859.00	25.89	159.47	8,812.48	141.46	10.96	639.94	10.41	
8,906.00	31.17	163.21	8,853.76	163.81	-10.31	647.06	11.85	
8,953.00	34.59	164.81	8,893.22	189.30	-34.83	654.07	7.51	
9,000.00	38.21	161.95	8,931.05	217.14	-61.54	662.08	8.50	
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)		
ILP	-6,195.0			9,189.5				
PBHL/TD	-6,125.0			9,119.5				
268_6_SPBY_L_B1/JO MILL	-6,263.0			9,257.5				
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		
VILLESCAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM		
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM		
COX, BRYAN, ENGINEER		ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM		
ORSAK, GILBERT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			830-832-5619	GILBERT.ORSAK@PXD.COM		
CASTILLO, FERNANDO, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM		
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM		
RIG-H&P 645, RIG PHONE		RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM		
Personnel Log								
Company							Count	
PIONEER NATURAL RESOURCES USA INC							2	
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13	
PIONEER NATURAL RESOURCES USA INC							1	
ALTITUDE ENERGY PARTNERS INC							3	
KAYDEN INDUSTRIES USA INC							1	
STRATAGRAPH INC							2	

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 540.00

Days Since RI: 540.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/12/2022

Report #: 10

DFS: 9

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$685,124.26

API/UWI 42-003-48472-0000				Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A3 (SPBY L A3)				Field Name SPRABERRY (TREND AREA)							
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date					
Jobs																	
Responsible Grp 2						Responsible Grp 3			Job Type	Start Date		End Date	Job Status				
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR	10/29/2021 12:30			IN PROGRESS				
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)																	
Type		Subtype						Date		Note							
MILESTONE		ESTIMATED PAD RELEASE						1/19/2022		3rd Well on 3 well Pad (1/5/22)							
Daily Operations																	
Footage/Meterage (ft) 596.00		Drilling Hours 19.50		% Rotating Time 35.47		End Depth (ftKB) 9,700.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$685,124.26		Cum Field Est To Date \$2,227,196.30					
24 HR ROP (ft/hr) 30.6	Circulating Hours	% Sliding Time 64.53	End Depth (TVD) (ftKB) 9,170.5		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$5,174.54		Cum Mud Field Est \$32,710.04		Total AFE + Sup \$2,911,162.04						
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 400.0				Daily Goal - Next 24 1,000.0			Goal Comments Goal met						
Backbuild Yes	Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB								
Avg Connection Gas 72.00		Avg Trip Gas 66.00		Avg Background Gas 73.00				Max Connection Gas 86.00		Max Trip Gas 88.00		Max Drill Gas 124.00					
Operations Summary Drill Production Curve F/9,104' T/9,588', Drill Production Lateral F/9,588' T/9,700', circulate, POOH F/ 9,700 T/8,619', Ream curve F/ 8,619' T/ 9,700' (95% sliding, Inc. 89.25°, Landed, MY: 15.26°, 12.92' high, 2.76' left)																	
Operations Next Report Period Circulate hole clean, TOO H for RSS, Laydown curve BHA, Pick up lateral BHA, TIH, and Drill production lateral per well plan #2																	
Operations At Report Time Reaming curve T/ 9,700'																	
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 2% %																	
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	17.75	23:45	PROD, DRL CURVE	DRL	NORMAL	Drilling Production Curve F/9,104' T/9,588', (484' @ 27 '/hr) WOB 8, RPM 0, GPM 650, SPP 3000, DIFF 200, torq 3k			9,104.0	9,588.0							
23:45	1.75	01:30	PROD, DRL LAT	DRL	NORMAL	Drilling Production Lateral F/9,588' T/9,700', (112' @ 64 '/hr) WOB 35, RPM 30, GPM 650, SPP 3420, DIFF 480, torq 13k			9,588.0	9,700.0							
01:30	1.25	02:45	PROD, DRL LAT	CIRC	NORMAL	Circulate 2 bottoms up			9,700.0	9,700.0							
02:45	0.25	03:00	PROD, DRL LAT	FLOW_CHK	NORMAL	Perform flow check. well static			9,700.0	9,700.0							
03:00	2	05:00	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOOH F/ 9,700' T/ 8,619'			9,700.0	9,700.0							
05:00	1	06:00	PROD, DRL LAT	TIH_NONELEV	NORMAL	Ream curve F/ 8,619' T/ 9,700'			9,700.0	9,700.0							
Drill Strings																	
BHA #3 , INTERMEDIATE 2																	
Bit Run 3			Drill Bit 8 3/4, SPL613, 56708						Bit Type PDC		Make ULTERRA						
Nozzles (1/32") 10/10/10/10/11/11/11/11			Bit Total Fluid Area (nozzles) (in²) 0.77			IADC Bit Dull -----			Hours Drilled By Bit (hr) 67.50		Depth Drilled By Bit (ft) 2,733.00						
BHA Drilling Time (hr) 67.50			BHA Depth Drilled (ft) 2,733.00			BHA ROP (ft/hr) 40.5			Depth In (ftKB) 6,967.0		Depth Out (ftKB) 9,700.0						
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make						
268	DRILL PIPE			5	4.27	8,435.10	9,700.00	164,484.5	232		RIG						
39	HWDP			5	3.00	1,169.73	1,264.90	57,316.8	67		RIG						
1	DRILL COLLAR - NON MAG			6 3/4	3.25	29.88	95.17	2,778.8	10		STABIL DRILL						
1	MWD TOOL - RETRIEVABLE			6 5/8	3.25	28.54	65.29	2,654.2	7		STABIL DRILL						
1	SUB - UBHO			6 3/4	2.50	3.70	36.75	925.0	5		GORDON						
1	MOTOR - SLICK SLEEVE			6 5/8	3.00	32.05	33.05	3,781.9	4		ALTITUDE ENERGY PARTNERS						
Mud Motors																	
SN		Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type		Bit To Bend				
AEP7019		2.12		NOT SEALED			6:7		6.5				4.05				
Sensors																	
Sensor Type				Sensor-Bit (ft)						Note							
GAMMA				44.60													
DIRECTIONAL				57.00													
Drilling Parameters																	
Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:40	9,104.0	48.00	72.0	35	0	200.0	650	3,000.0	72.0	207	218	194	207	0.0	5,000.0	45
06:40	07:05	9,152.0	18.00	43.2	35	35	500.0	650	3,000.0	43.2	207	218	194	207	13,000.0	5,000.0	0
07:05	08:40	9,170.0	29.00	18.3	35	0	200.0	650	3,000.0	18.3	207	218	194	207	0.0	5,000.0	60
08:40	09:05	9,199.0	8.00	19.2	35	35	500.0	650	3,000.0	19.2	207	218	194	207	13,000.0	5,000.0	0
09:05	11:25	9,207.0	39.00	16.7	35	0	200.0	650	3,000.0	16.7	207	218	194	207	0.0	5,000.0	30
11:25	12:00	9,246.0	9.00	15.4	35	35	500.0	650	3,000.0	15.4	207	218	194	207	12,000.0	5,000.0	0
12:00	13:45	9,255.0	38.00	21.7	35	0	200.0	650	3,000.0	21.7	207	218	194	207	0.0	5,000.0	30
13:45	15:00	9,293.0	19.00	15.2	35	35	500.0	650	3,000.0	15.2	207	218	194	207	10,000.0	5,000.0	0
15:00	15:55	9,312.0	28.00	30.5	35	0	200.0	650	3,000.0	30.5	207	218	194	207	0.0	5,000.0	30

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
9,284.00	66.46	165.32	9,101.18	440.37	-274.72	730.02	11.07
9,330.00	69.78	166.33	9,118.33	483.04	-316.11	740.46	7.50
9,377.00	72.59	166.71	9,133.48	527.53	-359.36	750.83	6.03
9,425.00	76.63	168.09	9,146.22	573.79	-404.52	760.92	8.86
9,472.00	79.92	169.41	9,155.77	619.75	-449.65	769.89	7.52
9,519.00	82.76	170.27	9,162.84	666.12	-495.38	778.09	6.31
9,613.00	89.25	169.31	9,169.39	759.66	-587.61	794.70	6.98
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)		Final Top (TVD) (ftKB)
ILP	-6,195.0			9,189.5			
268_6_SPBY_L_B1/JO MILL	-6,263.0			9,257.5			
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	
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER			ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
ORSAK, GILBERT, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		830-832-5619	GILBERT.ORSAK@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE			RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:541.00

Days Since RI:541.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/13/2022

Report #:11

DFS:10

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$81,979.61

API/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)			Field Name SPRABERRY (TREND AREA)								
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date			
Jobs															
Responsible Grp 2					Responsible Grp 3			Job Type		Start Date		End Date		Job Status	
DRL ENG - ALEXANDER LINDBLAD					AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type			Subtype					Date		Note					
MILESTONE			ESTIMATED PAD RELEASE					1/20/2022		3rd Well on 3 well Pad (1/5/22)					
Daily Operations															
Footage/Meterage (ft) 416.00			Drilling Hours 4.75		% Rotating Time 100.00		End Depth (ftKB) 10,116.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$81,979.61		Cum Field Est To Date \$2,309,175.91		
24 HR ROP (ft/hr) 87.6		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 9,169.9		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$1,409.58		Cum Mud Field Est \$34,119.62		Total AFE + Sup \$2,911,162.04	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 1,000.0			Daily Goal - Next 24 2,000.0			Goal Comments Goal not met due extended trip time					
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB					Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB						
Avg Connection Gas 0.00			Avg Trip Gas 45.00		Avg Background Gas 45.00			Max Connection Gas 0.00			Max Trip Gas 64.00		Max Drill Gas 0.00		
Operations Summary Ream curve T/ 9,700', circulate hole clean, POOH F/ 9,700' T/ 1,200', Laydown HWDP and BHA, Pick up Lateral BHA, TIH F/ 120' T/ 8,887', Wash thru curve T/ 9,700', Drill production Lateral F/ 9,700' T/ 10,116' (100% Rotate RSS, 1.45° avg lateral DLS, 5.47' below, .21' right of target line #1)															
Operations Next Report Period Drill Production Lateral T/12,116' per well plan #2															
Operations At Report Time Drilling Production lateral @ 10,116'															
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 6% %															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com				Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #		
06:00	1.25	07:15	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash and Ream thru curve f/9100' to 9700',				9,700.0	9,700.0				
07:15	1	08:15	PROD, DRL LAT	CIRC	NORMAL	CBU, Flow check, no flow				9,700.0	9,700.0				
08:15	1	09:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOOH f/ 9700' to 8460', curve smooth.				9,700.0	9,700.0				
09:15	0.25	09:30	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow check, pump slug.				9,700.0	9,700.0				
09:30	3.5	13:00	PROD, DRL LAT	TRIP_NON_ST80	NORMAL	TOOH to 1280', Use tongs on 17 stands.				9,700.0	9,700.0	3.50	5		
13:00	0.5	13:30	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Pull rotating head, install trip nipple.				9,700.0	9,700.0	0.50	5		
13:30	0.25	13:45	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOOH 3 strands HWDP and rack in derrick.				9,700.0	9,700.0	0.25	5		
13:45	2.5	16:15	PROD, DRL LAT	TRIP_NON_ST80	NORMAL	L/D 31 jts HWDP using tongs on most connections.				9,700.0	9,700.0	2.50	5		
16:15	1.5	17:45	PROD, DRL LAT	L/D BHA	NORMAL	L/D Curve BHA.				9,700.0	9,700.0				
17:45	0.5	18:15	PROD, DRL LAT	RIG_SVC	NORMAL	Clean rig floor				9,700.0	9,700.0				
18:15	0.5	18:45	PROD, DRL LAT	SFTY	NORMAL	Safety meeting with H&P and Altitude Energy on picking up lateral assembly				9,700.0	9,700.0				
18:45	1.5	20:15	PROD, DRL LAT	PU_DIR	NORMAL	Pick up 8.5" lateral BHA				9,700.0	9,700.0				
20:15	0.5	20:45	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, Drops inspection, and inspect in line screen				9,700.0	9,700.0				
20:45	2.75	23:30	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/ 119' - T/ 8,887' with proper displacement				9,700.0	9,700.0				
23:30	0.25	23:45	PROD, DRL LAT	HDL_ROTTHD	NORMAL	Install rotating head				9,700.0	9,700.0				
23:45	1.5	01:15	PROD, DRL LAT	TIH_NONELEV	NORMAL	Wash thru curve F/ 8,887' T/ 9,700'				9,700.0	9,700.0				
01:15	4.75	06:00	PROD, DRL LAT	DRL	NORMAL	Drilling Production Lateral F/9,700' T/10,116', (416' @ 87.5 '/hr) WOB 35, RPM 80, GPM 650, SPP 3700, DIFF 400, torq 13k				9,700.0	10,116.0				
Interval Problems															
RIG, 9,700.0ftKB, 1/12/2022 09:30															
Ref #	Dur (hr)	Exclude From Problem Time Calcs?		SubType	Problem Description	Est Cost OR (Cost)	Accountable Party			Comment					
5	6.75	No		PIPE HANDLING	PIPE SPINNER		HELMERICH & PAYNE INTERNATIONAL DRILLING CO			Unable to break out connections with ST-80 due to high torque. Had to use tongs to break connections.					
Drill Strings															
BHA #3 , PRODUCTION - CURVE/LATERAL															
Bit Run				3	Drill Bit 8 3/4, SPL613, 56708				Bit Type PDC		Make ULTERRA				
Nozzles (1/32") 10/10/10/10/11/11/11/11					Bit Total Fluid Area (nozzles) (in²) 0.77		IADC Bit Dull 2-2-CT-S-X-0-BT-BHA			Hours Drilled By Bit (hr) 67.50		Depth Drilled By Bit (ft) 2,733.00			

BHA #3 , PRODUCTION - CURVE/LATERAL																	
BHA Drilling Time (hr)			BHA Depth Drilled (ft)			BHA ROP (ft/hr)			Depth In (ftKB)			Depth Out (ftKB)					
67.50			2,733.00			40.5			6,967.0			9,700.0					
Drill String Components																	
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make							
268	DRILL PIPE		5	4.27	8,435.10	9,700.00	164,484.5	232		RIG							
39	HWDP		5	3.00	1,169.73	1,264.90	57,316.8	67		RIG							
1	DRILL COLLAR - NON MAG		6 3/4	3.25	29.88	95.17	2,778.8	10		STABIL DRILL							
1	MWD TOOL - RETRIEVABLE		6 5/8	3.25	28.54	65.29	2,654.2	7		STABIL DRILL							
1	SUB - UBHO		6 3/4	2.50	3.70	36.75	925.0	5		GORDON							
1	MOTOR - SLICK SLEEVE		6 5/8	3.00	32.05	33.05	3,781.9	4		ALTITUDE ENERGY PARTNERS							
Mud Motors																	
SN		Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type			Bit To Bend			
AEP7019		2.12		NOT SEALED			6:7		6.5					4.05			
Sensors																	
Sensor Type			Sensor-Bit (ft)				Note										
GAMMA			44.60														
DIRECTIONAL			57.00														
BHA #4 , PRODUCTION - LATERAL																	
Bit Run		Drill Bit					Bit Type			Make							
4		8 3/4, DD506THX, 5324722					PDC			GE/BAKER HUGHES							
Nozzles (1/32")		Bit Total Fluid Area (nozzles) (in²)			IADC Bit Dull			Hours Drilled By Bit (hr)			Depth Drilled By Bit (ft)						
10/10/10/12/12/12		0.56			-----			4.75			416.00						
BHA Drilling Time (hr)		BHA Depth Drilled (ft)			BHA ROP (ft/hr)			Depth In (ftKB)			Depth Out (ftKB)						
4.75		416.00			87.6			9,700.0			10,116.0						
Drill String Components																	
Jts	Item Des		OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make							
312	DRILL PIPE		5	4.27	9,815.39	10,211.00	191,400.1	215		RIG							
4	HWDP		5	3.00	119.03	395.61	5,832.5	24		Rig							
1	REAMER - DRILL N' REAM		6 1/2	3.50	8.49	276.58		18		DRILLING TOOLS INTERNATIONAL							
5	HWDP		5	3.00	149.53	268.09	7,327.0	18		Rig							
1	MOTOR - STABILIZER SLEEVE		7	2.50	35.20	118.56	3,238.4	11		ALTITUDE ENERGY PARTNERS							
1	SUB - FILTER		6.43	2.88	5.80	83.36	539.4	7		STABIL DRILL							
1	ACCELERATOR		6 3/4	2.88	17.08	77.56	1,537.2	7		TOMAX							
1	DRILL COLLAR - PONY, NON MAG		6 3/4	3.00	9.02	60.48	838.9	5		STABIL DRILL							
1	STABILIZER		6 3/4	3.25	4.71	51.46	438.0	5		Amega West							
1	MWD TOOL - NON-RETRIEVABLE		6 3/4	3.25	28.39	46.75	2,640.3	4		Gordon							
1	SUB - UBHO		6 3/4	2.50	3.91	18.36	265.9	2		GORDON							
1	RSS TOOL		6 3/4	3.00	13.45	14.45	1,237.4	1		ALTITUDE ENERGY PARTNERS							
Mud Motors																	
SN		Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type			Bit To Bend			
AEP7055		0		NOT SEALED			7:8		8.5					0			
Sensors																	
Sensor Type			Sensor-Bit (ft)				Note										
GAMMA			25.95														
DIRECTIONAL			38.00														
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 (°)
01:15	06:00	9,700.0	416.00	87.6	35	80	600.0	650	3,800.0	92.4	207	218	194	207	14,500.0	8,000.0	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)		
8.00	8.21		379.1		6.3	371.4	999.8	18.2		685.2		175.57	156.08		357.00		
Last BOP Test																	
Date		Test Type	Item Tested	Next Test Date	Com												
1/5/2022 06:00		BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.												
Leak Off and Formation Integrity Tests																	
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)					
FORMATION INTEGRITY								1,906.0				12.48					
FORMATION INTEGRITY								6,938.0				10.03					
Casing Pressure Test																	
Test Type		Test Subtype		Date			Item Tested						Failed?	Time (min)		P (psi)	
CASING		STANDARD		11/3/2021 12:00			SURFACE, 1,906.8ftKB						No	30.00		1,000.0	
CASING		STANDARD		1/8/2022 02:00			INTERMEDIATE, 6,938.7ftKB						No	30.00		2,500.0	
CASING		STANDARD		1/9/2022 00:15			INTERMEDIATE, 6,938.7ftKB						No	10.00		2,500.0	
Kick Offs & Key Depths																	
Date				Type			Top Depth (ftKB)				Depth Top (TVD) (ftKB)						
1/9/2022 21:30				KICK OFF			8,619.0				8,582.2						
1/11/2022 23:45				HEEL			9,588.0				9,168.7						
Casing Strings																	
Description			Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)		Top Thread		P LeakOff (psi)				
CONDUCTOR			106.5				20	H40	78.67								
SURFACE			1,906.8		1,906.6		13 3/8	J55	54.50		BTC		1,235.1				
INTERMEDIATE			6,938.7		6,902.8		9 5/8	L80-IC	40.00		BTC		3,598.0				
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					23,410		31300					
WATER		FRESH	BBL	0	0		Meter reading 71,980			0		15079					
DIESEL		FUEL	GAL		1554					15,365		20088					
Mud Additive Amounts																	
Des		Type					Units	Rec	Consumed		On Loc		Cum Cons				
BARITE-BULK		WEIGHTING MATERIAL					TON		7.42		75.0		32				
Pump Operations																	
Pump #	Make				Model		Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)			P Max (psi)				
1	GARDNER-DENVER				PZ-11		5 1/2		10.98	0.081			6,000.0				
2	GARDNER-DENVER				PZ-11		5 1/2		10.98	0.081			6,000.0				
3	GARDNER-DENVER				PZ-11		5 1/2		10.98	0.081			6,000.0				

Pump Checks							
Pump #	Depth (ftKB)		Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
1		9,739.0	1/13/2022 04:35	465.0	30	97	95
1		9,739.0	1/13/2022 04:35	545.0	40	129	95
1		9,739.0	1/13/2022 04:36	615.0	50	161	95
2		9,739.0	1/13/2022 04:36	470.0	30	97	95
2		9,739.0	1/13/2022 04:36	540.0	40	129	95
2		9,739.0	1/13/2022 04:36	620.0	50	161	95
Deviation Surveys							
Date 10/30/2021 06:00			Description AS DRILL SURVEY		Job ODR, 10/29/2021 12:30		
Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
9,703.00	90.01	168.85	9,169.97	849.55	-675.98	811.75	0.99
9,797.00	89.90	166.01	9,170.05	943.52	-767.72	832.21	3.02
9,892.00	90.15	166.20	9,170.00	1,038.52	-859.94	855.02	0.33
9,986.00	90.01	166.19	9,169.87	1,132.52	-951.22	877.45	0.15
Formations							
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP		-6,195.0			9,189.5		
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5		
Daily Contacts							
Job Contact			Title	Office	Mobile	Email	
HARDIN, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM	
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER			ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
LAWSON, JOHN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE			RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 542.00

Days Since RI: 542.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/14/2022

Report #: 12

DFS: 11

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$98,842.30

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)				Field Name SPRABERRY (TREND AREA)								
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date					
Jobs																	
Responsible Grp 2						Responsible Grp 3		Job Type		Start Date		End Date		Job Status			
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1		ODR		10/29/2021 12:30				IN PROGRESS			
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																	
Type			Subtype					Date		Note							
MILESTONE			ESTIMATED PAD RELEASE					1/20/2022		3rd Well on 3 well Pad (1/12/22)							
Daily Operations																	
Footage/Meterage (ft) 3,780.00		Drilling Hours 23.50		% Rotating Time 100.00		End Depth (ftKB) 13,896.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$98,842.30		Cum Field Est To Date \$2,408,020.13					
24 HR ROP (ft/hr) 160.9		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 9,160.3		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$4,496.73		Cum Mud Field Est \$38,616.35		Total AFE + Sup \$2,911,162.04			
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,000.0				Daily Goal - Next 24 3,000.0				Goal Comments Goal met					
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB							
Avg Connection Gas 230.00			Avg Trip Gas 0.00		Avg Background Gas 211.00			Max Connection Gas 404.00			Max Trip Gas 0.00		Max Drill Gas 492.00				
Operations Summary Drill production lateral F/ 10,116' T/ 13,896' (100% Rotate RSS, 0.73° avg lateral DLS, 5.72' below, 4.97' right of target line #2)																	
Operations Next Report Period Drill Production Lateral T/16,896' per well plan #2																	
Operations At Report Time Drilling Production lateral @ 13,896'																	
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 43%%																	
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		23.5	05:30	PROD, DRL LAT		DRL	NORMAL	Drilling Production Lateral F/10,116' T/13,896', (3,780' @ 160 'hr) WOB 45, RPM 80, GPM 650, SPP 3900, DIFF 270, torq 13k				10,116.0		13,896.0			
05:30		0.5	06:00	PROD, DRL LAT		RIG_SVC	NORMAL	Rig service, drops inspection, and inspect in line screen				13,896.0		13,896.0			
Drill Strings																	
BHA #4 , PRODUCTION - LATERAL																	
Bit Run 4				Drill Bit 8 3/4, DD506THX, 5324722					Bit Type PDC			Make GE/BAKER HUGHES					
Nozzles (1/32") 10/10/10/12/12/12				Bit Total Fluid Area (nozzles) (in²) 0.56			IADC Bit Dull -----			Hours Drilled By Bit (hr) 28.25		Depth Drilled By Bit (ft) 4,196.00					
BHA Drilling Time (hr) 28.25				BHA Depth Drilled (ft) 4,196.00			BHA ROP (ft/hr) 148.5			Depth In (ftKB) 9,700.0		Depth Out (ftKB) 13,896.0					
Drill String Components																	
Jts		Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)		Make				
429		DRILL PIPE				5	4.27	13,500.39	13,896.00	263,257.6	287		RIG				
4		HWDP				5	3.00	119.03	395.61	5,832.5	24		Rig				
1		REAMER - DRILL N' REAM				6 1/2	3.50	8.49	276.58		18		DRILLING TOOLS INTERNATIONAL				
5		HWDP				5	3.00	149.53	268.09	7,327.0	18		Rig				
1		MOTOR - STABILIZER SLEEVE				7	2.50	35.20	118.56	3,238.4	11		ALTITUDE ENERGY PARTNERS				
1		SUB - FILTER				6.43	2.88	5.80	83.36	539.4	7		STABIL DRILL				
1		ACCELERATOR				6 3/4	2.88	17.08	77.56	1,537.2	7		TOMAX				
1		DRILL COLLAR - PONY, NON MAG				6 3/4	3.00	9.02	60.48	838.9	5		STABIL DRILL				
1		STABILIZER				6 3/4	3.25	4.71	51.46	438.0	5		Amega West				
1		MWD TOOL - NON-RETRIEVABLE				6 3/4	3.25	28.39	46.75	2,640.3	4		Gordon				
1		SUB - UBHO				6 3/4	2.50	3.91	18.36	265.9	2		GORDON				
1		RSS TOOL				6 3/4	3.00	13.45	14.45	1,237.4	1		ALTITUDE ENERGY PARTNERS				
Mud Motors																	
SN			Bend Angle		Bearing Type			Lobe Config		# Stages		Lwr Defln Type		Bit To Bend			
AEP7055			0		NOT SEALED			7:8		8.5				0			
Sensors																	
Sensor Type					Sensor-Bit (ft)					Note							
GAMMA					25.95												
DIRECTIONAL					38.00												
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	07:15	10,116.0	189.00	151.2	35	80	600.0	650	3,800.0	151.2	212	224	195	212	14,500.0	8,000.0	0
07:15	08:00	10,305.0	95.00	126.7	35	100	500.0	650	3,750.0	126.7	212	224	195	212	14,500.0	8,000.0	0
08:00	09:05	10,400.0	175.00	161.5	45	100	350.0	650	3,550.0	161.5	212	224	195	212	14,500.0	8,000.0	0
09:05	11:25	10,575.0	392.00	168.0	45	120	700.0	650	3,900.0	168.0	212	224	195	212	15,000.0	8,000.0	0
11:25	15:10	10,967.0	662.00	176.5	45	140	700.0	650	3,900.0	176.5	212	224	193	212	15,000.0	8,000.0	0
15:10	18:00	11,629.0	472.00	166.6	45	120	700.0	650	3,925.0	166.6	212	224	193	212	15,500.0	8,000.0	0
18:00	00:00	12,101.0	1,060.00	176.7	45	100	700.0	650	3,950.0	176.7	212	224	193	212	16,000.0	8,000.0	0
00:00	05:30	13,161.0	735.00	133.6	45	80	700.0	650	3,975.0	133.6	212	224	193	212	16,500.0	8,000.0	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)
8.00	8.31	379.1	6.3	371.4	999.8	18.2	685.2	242.52	329.58	357.00
Last BOP Test										
Date	Test Type	Item Tested	Next Test Date	Com						
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.						
Leak Off and Formation Integrity Tests										
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)		
FORMATION INTEGRITY						1,906.0		12.48		
FORMATION INTEGRITY						6,938.0		10.03		
Casing Pressure Test										
Test Type	Test Subtype	Date		Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/3/2021 12:00		SURFACE, 1,906.8ftKB			No	30.00	1,000.0	
CASING	STANDARD	1/8/2022 02:00		INTERMEDIATE, 6,938.7ftKB			No	30.00	2,500.0	
CASING	STANDARD	1/9/2022 00:15		INTERMEDIATE, 6,938.7ftKB			No	10.00	2,500.0	
Kick Offs & Key Depths										
Date			Type	Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
1/9/2022 21:30			KICK OFF	8,619.0			8,582.2			
1/11/2022 23:45			HEEL	9,588.0			9,168.7			
Casing Strings										
Description	Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.5				20	H40	78.67			
SURFACE	1,906.8		1,906.6		13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE	6,938.7		6,902.8		9 5/8	L80-IC	40.00	BTC	3,598.0	
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		4500				18,910	35800	
WATER	FRESH	BBL	0	0		Meter reading 71,980		0	15079	
DIESEL	FUEL	GAL		2459				12,906	22547	
Mud Additive Amounts										
Des			Type			Units	Rec	Consumed	On Loc	Cum Cons
BCI OBM RHEO MODIFIER			OIL MUD ADDITIVE			GAL		1	4.0	5
BENTONE 910			OIL MUD ADDITIVE			SACK		15	50.0	70
BENTONE 990			OIL MUD ADDITIVE			SACK		14	50.0	70
CALCIUM CHORIDE-POWDER			SALT			SACK		25	145.0	145
GILSOCOL GP			SPECIALITY			SACK		20	20.0	80
LIME			ALKALINITY CONTROL			SACK		50	140.0	260
Pump Operations										
Pump #	Make			Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11	5 1/2	10.98	0.081		6,000.0	
2	GARDNER-DENVER			PZ-11	5 1/2	10.98	0.081		6,000.0	
3	GARDNER-DENVER			PZ-11	5 1/2	10.98	0.081		6,000.0	
Pump Checks										
Pump #	Depth (ftKB)		Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)	
1	13,613.0		1/14/2022 04:37	630.0	20		64		95	
1	13,613.0		1/14/2022 04:37	680.0	30		97		95	
1	13,613.0		1/14/2022 04:37	750.0	40		129		95	
3	13,613.0		1/14/2022 04:38	645.0	20		64		95	
3	13,613.0		1/14/2022 04:38	695.0	30		97		95	
3	13,613.0		1/14/2022 04:38	755.0	40		129		95	
Deviation Surveys										
Date			Description				Job			
10/30/2021 06:00			AS DRILL SURVEY				ODR, 10/29/2021 12:30			
Survey Data - All surveys for 24 hr reporting period										
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)			
10,175.00	90.18	165.97	9,169.47	1,321.51	-1,134.37	924.13	0.68			
10,269.00	90.04	166.16	9,169.29	1,415.51	-1,225.60	946.77	0.25			
10,364.00	90.07	165.92	9,169.20	1,510.51	-1,317.79	969.69	0.25			
10,458.00	90.49	165.79	9,168.74	1,604.50	-1,408.94	992.66	0.47			
10,552.00	90.49	165.94	9,167.93	1,698.50	-1,500.09	1,015.61	0.16			
10,647.00	90.66	165.95	9,166.98	1,793.49	-1,592.24	1,038.68	0.18			
10,742.00	90.57	166.13	9,165.96	1,888.49	-1,684.43	1,061.60	0.21			
10,836.00	90.40	165.83	9,165.16	1,982.48	-1,775.63	1,084.37	0.37			
10,931.00	90.24	166.29	9,164.63	2,077.48	-1,867.83	1,107.26	0.51			
11,026.00	90.04	166.19	9,164.40	2,172.48	-1,960.10	1,129.85	0.24			
11,120.00	89.79	166.20	9,164.54	2,266.48	-2,051.39	1,152.28	0.27			
11,215.00	89.82	166.33	9,164.86	2,361.48	-2,143.67	1,174.84	0.14			
11,310.00	90.18	166.50	9,164.86	2,456.48	-2,236.01	1,197.15	0.42			
11,404.00	90.04	166.13	9,164.68	2,550.48	-2,327.34	1,219.39	0.42			
11,498.00	90.82	168.12	9,163.98	2,644.46	-2,418.97	1,240.34	2.27			
11,593.00	90.01	166.74	9,163.29	2,739.43	-2,511.69	1,261.01	1.68			
11,687.00	90.21	166.83	9,163.11	2,833.43	-2,603.20	1,282.50	0.23			
11,781.00	90.63	167.11	9,162.42	2,927.42	-2,694.78	1,303.69	0.54			
11,876.00	90.18	166.49	9,161.75	3,022.41	-2,787.26	1,325.38	0.81			
11,970.00	90.18	166.38	9,161.45	3,116.41	-2,878.64	1,347.43	0.12			
12,065.00	90.24	166.39	9,161.11	3,211.41	-2,970.97	1,369.79	0.06			
12,159.00	90.60	167.76	9,160.42	3,305.39	-3,062.58	1,390.82	1.51			
12,253.00	91.05	166.82	9,159.06	3,399.37	-3,154.27	1,411.50	1.11			
12,348.00	90.12	166.55	9,158.09	3,494.36	-3,246.71	1,433.38	1.02			
12,442.00	89.26	165.53	9,158.60	3,588.36	-3,337.93	1,456.05	1.42			
12,537.00	89.28	165.85	9,159.81	3,683.34	-3,429.98	1,479.53	0.34			
12,632.00	89.82	165.50	9,160.56	3,778.33	-3,522.02	1,503.04	0.68			
12,726.00	90.49	167.71	9,160.30	3,872.33	-3,613.45	1,524.81	2.46			
12,821.00	90.12	166.35	9,159.80	3,967.31	-3,706.03	1,546.13	1.48			
12,916.00	89.93	166.35	9,159.76	4,062.31	-3,798.34	1,568.55	0.20			
13,010.00	89.96	166.43	9,159.85	4,156.31	-3,889.70	1,590.67	0.09			
13,105.00	90.21	166.35	9,159.71	4,251.31	-3,982.04	1,613.02	0.28			

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
13,199.00	88.92	166.14	9,160.42	4,345.31	-4,073.34	1,635.37	1.39
13,293.00	90.21	166.97	9,161.13	4,439.30	-4,164.75	1,657.23	1.63
13,388.00	90.04	166.32	9,160.93	4,534.30	-4,257.18	1,679.17	0.71
13,482.00	89.84	165.63	9,161.02	4,628.30	-4,348.38	1,701.95	0.76
13,577.00	90.57	165.97	9,160.68	4,723.29	-4,440.48	1,725.26	0.85
13,671.00	90.43	165.94	9,159.86	4,817.29	-4,531.66	1,748.07	0.15
13,766.00	89.76	165.80	9,159.71	4,912.28	-4,623.79	1,771.26	0.72
Formations							
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
ILP	-6,195.0			9,189.5			
268_6_SPBY_L_B1/JO MILL	-6,263.0			9,257.5			
Daily Contacts							
Job Contact			Title	Office	Mobile	Email	
HARDIN, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM	
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER			ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
LAWSON, JOHN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE			RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:543.00

Days Since RI:543.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/15/2022

Report #:13

DFS:12

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$89,743.22

API/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)			Field Name SPRABERRY (TREND AREA)										
SSN ID00038659		Property Sub	KB-Grd (ft) 26.50	Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021	TD Date								
Jobs																	
Responsible Grp 2				Responsible Grp 3		Job Type	Start Date		End Date	Job Status							
DRL ENG - ALEXANDER LINDBLAD				AREA TEAM 1		ODR	10/29/2021 12:30			IN PROGRESS							
Job Dates (ex. Estimated Pad Release, TXRRC Calls)																	
Type		Subtype				Date		Note									
MILESTONE		ESTIMATED PAD RELEASE				1/20/2022		3rd Well on 3 well Pad (1/12/22)									
Daily Operations																	
Footage/Meterage (ft) 2,298.00		Drilling Hours 24.00	% Rotating Time 100.00	End Depth (ftKB) 16,194.0	Target Depth (ftKB) 19,471.0		Daily Field Est Total \$89,743.22		Cum Field Est To Date \$2,497,763.35								
24 HR ROP (ft/hr) 95.7	Circulating Hours	% Sliding Time 0.00	End Depth (TVD) (ftKB) 9,130.2		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$10,916.19		Cum Mud Field Est \$49,532.54	Total AFE + Sup \$2,911,162.04							
Daily Goal Description DRILLED FEET			Daily Goal - Last 24 3,000.0		Daily Goal - Next 24 2,000.0		Goal Comments Goal not met due to low ROP										
Backbuild Yes	Lateral Inclination	Last Casing String INTERMEDIATE, 6,938.7ftKB				Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB											
Avg Connection Gas 154.00		Avg Trip Gas 0.00	Avg Background Gas 129.00		Max Connection Gas 339.00		Max Trip Gas 0.00		Max Drill Gas 329.00								
Operations Summary																	
Drilling Production Lateral F/13,896' T/16,194' (100% Rotate RSS, 0.68° avg lateral DLS, 3.37' above, 0.52' leftt of target line #5)																	
Operations Next Report Period																	
Drill Production Lateral T/18,194' per well plan #2																	
Operations At Report Time																	
Drilling Production lateral @ 16,194'																	
Remarks																	
Surf: 100%																	
Int. 1: 100%																	
Prod. Vert.: 100%																	
Prod. Curve: 100%																	
Prod. Lateral: 67%																	
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	23	05:00	PROD, DRL LAT	DRL	NORMAL	Drilling Production Lateral F/13,896' T/16,163', (2,267' @ 98 'hr) WOB 45, RPM 80, GPM 650, SPP 4250, DIFF 270, torq 15k		13,896.0	16,163.0								
05:00	0.5	05:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig service, drops inspection, and inspect in line screen		16,163.0	16,163.0								
05:30	0.5	06:00	PROD, DRL LAT	DRL	NORMAL	Drilling Production Lateral F/16,163' T/16,194', (31' @ 62 'hr) WOB 45, RPM 80, GPM 650, SPP 4250, DIFF 270, torq 15k		16,163.0	16,194.0								
Drill Strings																	
BHA #4 , PRODUCTION - LATERAL																	
Bit Run 4			Drill Bit 8 3/4, DD506THX, 5324722				Bit Type PDC		Make GE/BAKER HUGHES								
Nozzles (1/32") 10/10/10/12/12/12			Bit Total Fluid Area (nozzles) (in²) 0.56			IADC Bit Dull -----		Hours Drilled By Bit (hr) 52.25		Depth Drilled By Bit (ft) 6,494.00							
BHA Drilling Time (hr) 52.25			BHA Depth Drilled (ft) 6,494.00			BHA ROP (ft/hr) 124.3		Depth In (ftKB) 9,700.0		Depth Out (ftKB) 16,194.0							
Drill String Components																	
Jts	Item Des			OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make							
502	DRILL PIPE			5	4.27	15,798.39	16,194.00	308,068.6	332	RIG							
4	HWDP			5	3.00	119.03	395.61	5,832.5	24	Rig							
1	REAMER - DRILL N' REAM			6 1/2	3.50	8.49	276.58		18	DRILLING TOOLS INTERNATIONAL							
5	HWDP			5	3.00	149.53	268.09	7,327.0	18	Rig							
1	MOTOR - STABILIZER SLEEVE			7	2.50	35.20	118.56	3,238.4	11	ALTITUDE ENERGY PARTNERS							
1	SUB - FILTER			6.43	2.88	5.80	83.36	539.4	7	STABIL DRILL							
1	ACCELERATOR			6 3/4	2.88	17.08	77.56	1,537.2	7	TOMAX							
1	DRILL COLLAR - PONY, NON MAG			6 3/4	3.00	9.02	60.48	838.9	5	STABIL DRILL							
1	STABILIZER			6 3/4	3.25	4.71	51.46	438.0	5	Amega West							
1	MWD TOOL - NON-RETRIEVABLE			6 3/4	3.25	28.39	46.75	2,640.3	4	Gordon							
1	SUB - UBHO			6 3/4	2.50	3.91	18.36	265.9	2	GORDON							
1	RSS TOOL			6 3/4	3.00	13.45	14.45	1,237.4	1	ALTITUDE ENERGY PARTNERS							
Mud Motors																	
SN		Bend Angle		Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend						
AEP7055		0		NOT SEALED		7:8		8.5			0						
Sensors																	
Sensor Type				Sensor-Bit (ft)				Note									
GAMMA				25.95													
DIRECTIONAL				38.00													
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	12:00	13,896.0	692.00	115.3	45	80	550.0	650	4,200.0	115.3	208	230	184	208	14,500.0	8,000.0	0
12:00	18:00	14,588.0	610.00	101.7	45	100	500.0	650	4,150.0	101.7	208	230	184	208	14,500.0	8,000.0	0
18:00	00:00	15,198.0	554.00	92.3	45	120	500.0	650	4,100.0	92.3	208	230	184	208	14,500.0	8,000.0	0
00:00	05:00	15,752.0	411.00	74.7	45	140	500.0	650	4,050.0	82.2	208	230	184	208	14,500.0	8,000.0	0
05:30	06:00	16,163.0	31.00	62.0	45	140	500.0	650	4,050.0	62.0	208	230	184	208	14,500.0	8,000.0	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)	
8.00		8.37	379.1		6.3	371.4	999.8	18.2		685.2		283.23		435.06		357.00	

Last BOP Test								
Date	Test Type	Item Tested	Next Test Date	Com				
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.				
Leak Off and Formation Integrity Tests								
Test Type			Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY			1,906.0		12.48			
FORMATION INTEGRITY			6,938.0		10.03			
Casing Pressure Test								
Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)		
CASING	STANDARD	11/3/2021 12:00	SURFACE, 1,906.8ftKB	No	30.00	1,000.0		
CASING	STANDARD	1/8/2022 02:00	INTERMEDIATE, 6,938.7ftKB	No	30.00	2,500.0		
CASING	STANDARD	1/9/2022 00:15	INTERMEDIATE, 6,938.7ftKB	No	10.00	2,500.0		
Kick Offs & Key Depths								
Date		Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)				
1/9/2022 21:30		KICK OFF	8,619.0	8,582.2				
1/11/2022 23:45		HEEL	9,588.0	9,168.7				
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.5		20	H40	78.67			
SURFACE	1,906.8	1,906.6	13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE	6,938.7	6,902.8	9 5/8	L80-IC	40.00	BTC	3,598.0	
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		5000			13,910	40800
WATER	FRESH	BBL	0	0		Meter reading 71,980	0	15079
DIESEL	FUEL	GAL		3806			9,100	26353
Mud Additive Amounts								
Des			Type	Units	Rec	Consumed	On Loc	Cum Cons
BULK TANK RENTAL			MISCELLANEOUS	DAY	10	10	0.0	10
TRANSPORTATION			MISCELLANEOUS	EA	2700	2700	0.0	2,700
BCI OBM PRIMARY			OIL MUD ADDITIVE	GAL		1	6.0	4
BCI OBM SECONDARY			OIL MUD ADDITIVE	GAL		1	6.0	4
BCI OBM RHEO MODIFIER			OIL MUD ADDITIVE	GAL		1	3.0	6
BENTONE 910			OIL MUD ADDITIVE	SACK	40	25	65.0	95
BENTONE 990			OIL MUD ADDITIVE	SACK	40	25	65.0	95
CALCIUM CHORIDE-POWDER			SALT	SACK		40	105.0	185
GILSOCOL GP			SPECIALITY	SACK	100	15	105.0	95
LIME			ALKALINITY CONTROL	SACK	150	80	210.0	340
PALLETS			MISCELLANEOUS	EA	10	10	0.0	20
SHRINK WRAP			SERVICE	EA	9	9	12.0	21
SOLTEX			FLUID LOSS ADDITIVES	SACK	40	5	45.0	35
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)		
1	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
2	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
3	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)		
2	15,973.0	1/15/2022 04:43	740.0	20	64	95		
2	15,973.0	1/15/2022 04:43	780.0	30	97	95		
2	15,973.0	1/15/2022 04:43	850.0	40	129	95		
3	15,973.0	1/15/2022 04:44	730.0	20	64	95		
3	15,973.0	1/15/2022 04:44	780.0	30	97	95		
3	15,973.0	1/15/2022 04:44	870.0	40	129	95		
Deviation Surveys								
Date			Description	Job				
10/30/2021 06:00			AS DRILL SURVEY	ODR, 10/29/2021 12:30				
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
13,954.00	90.80	166.42	9,158.26	5,100.27	-4,806.27	1,816.45	0.43	
14,049.00	90.99	166.80	9,156.78	5,195.26	-4,898.67	1,838.45	0.45	
14,143.00	90.63	166.20	9,155.45	5,289.25	-4,990.07	1,860.39	0.74	
14,238.00	90.63	166.01	9,154.41	5,384.24	-5,082.28	1,883.20	0.20	
14,333.00	90.66	165.86	9,153.34	5,479.24	-5,174.43	1,906.29	0.16	
14,427.00	90.52	166.06	9,152.37	5,573.23	-5,265.61	1,929.09	0.26	
14,522.00	90.07	166.47	9,151.88	5,668.23	-5,357.90	1,951.65	0.64	
14,616.00	90.01	166.28	9,151.81	5,762.23	-5,449.25	1,973.79	0.21	
14,711.00	89.65	166.49	9,152.10	5,857.23	-5,541.58	1,996.15	0.44	
14,805.00	89.45	167.03	9,152.83	5,951.22	-5,633.08	2,017.68	0.61	
14,899.00	90.01	166.79	9,153.28	6,045.21	-5,724.63	2,038.97	0.65	
14,994.00	90.71	166.65	9,152.68	6,140.21	-5,817.09	2,060.79	0.75	
15,088.00	90.40	166.83	9,151.77	6,234.20	-5,908.58	2,082.35	0.38	
15,183.00	90.80	166.85	9,150.77	6,329.19	-6,001.08	2,103.98	0.42	
15,277.00	91.13	166.23	9,149.19	6,423.17	-6,092.49	2,125.86	0.75	
15,371.00	91.22	166.55	9,147.26	6,517.15	-6,183.83	2,147.97	0.35	
15,466.00	91.10	166.27	9,145.34	6,612.13	-6,276.15	2,170.29	0.32	
15,560.00	91.08	166.59	9,143.55	6,706.12	-6,367.51	2,192.34	0.34	
15,655.00	92.11	166.67	9,140.91	6,801.08	-6,459.89	2,214.30	1.09	
15,749.00	90.94	164.70	9,138.41	6,895.03	-6,550.94	2,237.53	2.44	
15,843.00	90.88	164.25	9,136.91	6,988.97	-6,641.50	2,262.69	0.48	
15,938.00	90.74	164.33	9,135.57	7,083.91	-6,732.94	2,288.41	0.17	
16,033.00	91.30	164.27	9,133.88	7,178.84	-6,824.38	2,314.11	0.59	
Formations								
Formation Name	Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)		
ILP	-6,195.0			9,189.5				
268_6_SPBY_L_B1/JO MILL	-6,263.0			9,257.5				

Daily Contacts				
Job Contact	Title	Office	Mobile	Email
HARDIN, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM
VILLESAS, BERNIE, SUPERINTENDENT	SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESAS@PXD.COM
LINDBLAD, ALEXANDER, ENGINEER	ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
LAWSON, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM
CASTILLO, FERNANDO, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		210-334-5154	FERNANDO.CASTILLO@PXD.COM
VELUETA, ALAN, MUD ENGINEER	MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM
RIG-H&P 645, RIG PHONE	RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM
Personnel Log				
Company				Count
PIONEER NATURAL RESOURCES USA INC				2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO				13
PIONEER NATURAL RESOURCES USA INC				1
ALTITUDE ENERGY PARTNERS INC				3
KAYDEN INDUSTRIES USA INC				1
STRATAGRAPH INC				2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:544.00

Days Since RI:544.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/16/2022

Report #:14

DFS:13

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$123,089.20

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)			Field Name SPRABERRY (TREND AREA)									
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date					
Jobs																	
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)																	
Type			Subtype						Date		Note						
MILESTONE			ESTIMATED PAD RELEASE						1/20/2022		3rd Well on 3 well Pad (1/16/22)						
Daily Operations																	
Footage/Meterage (ft) 383.00			Drilling Hours 5.00		% Rotating Time 100.00		End Depth (ftKB) 16,577.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$123,089.20			Cum Field Est To Date \$2,620,852.55			
24 HR ROP (ft/hr) 76.6		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 9,124.6		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$3,880.67			Cum Mud Field Est \$53,413.21		Total AFE + Sup \$2,911,162.04		
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,000.0				Daily Goal - Next 24 2,000.0			Goal Comments Goal not met due to bit trip						
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB							
Avg Connection Gas 147.00			Avg Trip Gas 101.00		Avg Background Gas 123.00			Max Connection Gas 174.00			Max Trip Gas 121.00		Max Drill Gas 171.00				
Operations Summary Drilling Production Lateral F/16,194' T/16,577', Circulate hole clean, POOH F/ 16,577' T/BHA, Lay Down directional tools, Pick up directional tools, TIH F/ 120' T/ 6,900', slip and cut drill line, TIH F/ 6,900' T/ 16,577' (100% Rotate RSS, 0.68° avg lateral DLS, 3.04' below, 14.42' left of target line #5)																	
Operations Next Report Period Finish TIH and Drill Production Lateral T/18,577' per well plan #2																	
Operations At Report Time TIH @ 16,577'																	
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 68% Covid-19: 0																	
Time Log																	
Start Time	Dur (hr)	End Time	Phase		Operation	Ops Category	Com				Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #	
06:00	5	11:00	PROD, DRL LAT		DRL	NORMAL	Drilling Production Lateral F/16,194' T/16,577', (383' @ 77 '/hr) WOB 45, RPM 130, GPM 650, SPP 4250, DIFF 270, torq 15k				16,194.0		16,577.0				
11:00	1.5	12:30	PROD, DRL LAT		CIRC	NORMAL	CBU for trip out due to low ROP, Set RSS to neutral.				16,577.0		16,577.0				
12:30	0.25	12:45	PROD, DRL LAT		FLOW_CHK	NORMAL	Flow check, no flow				16,577.0		16,577.0				
12:45	0.5	13:15	PROD, DRL LAT		TOOH_ELEV	NORMAL	TOOH 5 stands				16,577.0		16,577.0				
13:15	0.25	13:30	PROD, DRL LAT		FLOW_CHK	NORMAL	Flow check, pump slug.				16,577.0		16,577.0				
13:30	6.75	20:15	PROD, DRL LAT		TOOH_ELEV	NORMAL	POOH F/15,720' T/ 119' with proper displacement				16,577.0		16,577.0				
20:15	0.5	20:45	PROD, DRL LAT		HDL_ROTHTD	NORMAL	Remove Rotating head				16,577.0		16,577.0				
20:45	0.25	21:00	PROD, DRL LAT		SFTY	NORMAL	Safety meeting with H&P and Altitude Energy on laying down BHA				16,577.0		16,577.0				
21:00	0.75	21:45	PROD, DRL LAT		LD_DIR	NORMAL	Laydown motor, stabilizer, and bit				16,577.0		16,577.0				
21:45	0.75	22:30	PROD, DRL LAT		PU_DIR	NORMAL	Pick up new motor, stabilizer, and bit				16,577.0		16,577.0				
22:30	2	00:30	PROD, DRL LAT		TIH_ELEV	NORMAL	TIH F/ 120' T/ 6,900' with proper displacement				16,577.0		16,577.0				
00:30	0.25	00:45	PROD, DRL LAT		HDL_ROTHTD	NORMAL	Install rotating head				16,577.0		16,577.0				
00:45	0.75	01:30	PROD, DRL LAT		SLIP_CUT	NORMAL	Slip and cut drill line				16,577.0		16,577.0				
01:30	0.5	02:00	PROD, DRL LAT		RIG_SVC	NORMAL	Rig Service, drops inspection, and inspect in line screen				16,577.0		16,577.0				
02:00	4	06:00	PROD, DRL LAT		TIH_ELEV	NORMAL	TIH F/ 6,900' T/16,577' with proper displacement				16,577.0		16,577.0				
Drill Strings																	
BHA #4 , PRODUCTION - LATERAL																	
Bit Run				Drill Bit 4 8 1/2, DD506THX, 5324722				Bit Type PDC				Make GE/BAKER HUGHES					
Nozzles (1/32") 10/10/10/12/12/12				Bit Total Fluid Area (nozzles) (in²) 0.56				IADC Bit Dull 1-2-CT-S-X-0-NO-PR				Hours Drilled By Bit (hr) 57.25		Depth Drilled By Bit (ft) 6,877.00			
BHA Drilling Time (hr) 57.25				BHA Depth Drilled (ft) 6,877.00				BHA ROP (ft/hr) 120.1				Depth In (ftKB) 9,700.0		Depth Out (ftKB) 16,577.0			
Drill String Components																	
Jts	Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make						
516	DRILL PIPE				5	4.27	16,181.39	16,577.00	315,537.1	339	RIG						
4	HWDP				5	3.00	119.03	395.61	5,832.5	24	Rig						
1	REAMER - DRILL N' REAM				6 1/2	3.50	8.49	276.58		18	DRILLING TOOLS INTERNATIONAL						
5	HWDP				5	3.00	149.53	268.09	7,327.0	18	Rig						
1	MOTOR - STABILIZER SLEEVE				7	2.50	35.20	118.56	3,238.4	11	ALTITUDE ENERGY PARTNERS						
1	SUB - FILTER				6.43	2.88	5.80	83.36	539.4	7	STABIL DRILL						
1	ACCELERATOR				6 3/4	2.88	17.08	77.56	1,537.2	7	TOMAX						
1	DRILL COLLAR - PONY, NON MAG				6 3/4	3.00	9.02	60.48	838.9	5	STABIL DRILL						
1	STABILIZER				6 3/4	3.25	4.71	51.46	438.0	5	Amega West						
1	MWD TOOL - NON-RETRIEVABLE				6 3/4	3.25	28.39	46.75	2,640.3	4	Gordon						
1	SUB - UBHO				6 3/4	2.50	3.91	18.36	265.9	2	GORDON						
1	RSS TOOL				6 3/4	3.00	13.45	14.45	1,237.4	1	ALTITUDE ENERGY PARTNERS						
Mud Motors																	
SN		Bend Angle			Bearing Type			Lobe Config		# Stages		Lwr Defln Type			Bit To Bend		
AEP7055		0			NOT SEALED			7:8		8.5							

Sensors																	
Sensor Type				Sensor-Bit (ft)						Note							
GAMMA				25.95													
DIRECTIONAL				38.00													
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	07:25	16,194.0	151.00	106.6	45	100	550.0	650	4,300.0	106.6	208	230	184	208	14,500.0	8,000.0	0
07:25	11:00	16,345.0	232.00	64.7	45	130	450.0	655	4,345.0	64.7	208	230	178	208	18,000.0	9,000.0	0
BHA #5 , PRODUCTION - LATERAL																	
Bit Run				Drill Bit 5 8 1/2, DD506THX, 5321108								Bit Type PDC			Make GE/BAKER HUGHES		
Nozzles (1/32") 10/10/10/12/12/12				Bit Total Fluid Area (nozzles) (in²) 0.56				IADC Bit Dull -----				Hours Drilled By Bit (hr)			Depth Drilled By Bit (ft)		
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						
516	DRILL PIPE				5	4.27	16,183.46	16,577.00	315,577.5	339	RIG						
4	HWDP				5	3.00	119.03	393.54	5,832.5	24	Rig						
1	REAMER - DRILL N' REAM				6 1/2	3.50	8.49	274.51		18	DRILLING TOOLS INTERNATIONAL						
5	HWDP				5	3.00	149.53	266.02	7,327.0	18	Rig						
1	MOTOR - STABILIZER SLEEVE				7	2.50	33.08	116.49	3,043.4	11	ALTITUDE ENERGY PARTNERS						
1	SUB - FILTER				6.43	2.88	5.80	83.41	539.4	8	STABIL DRILL						
1	ACCELERATOR				6 3/4	2.88	17.08	77.61	1,537.2	7	TOMAX						
1	DRILL COLLAR - PONY, NON MAG				6 3/4	3.00	9.02	60.53	838.9	5	STABIL DRILL						
1	STABILIZER				6 3/4	3.25	4.76	51.51	442.7	5	Amega West						
1	MWD TOOL - NON-RETRIEVABLE				6 3/4	3.25	28.39	46.75	2,640.3	4	Gordon						
1	SUB - UBHO				6 3/4	2.50	3.91	18.36	265.9	2	GORDON						
1	RSS TOOL				6 3/4	3.00	13.45	14.45	1,237.4	1	ALTITUDE ENERGY PARTNERS						
Mud Motors																	
SN		Bend Angle		Bearing Type				Lobe Config		# Stages		Lwr Defln Type			Bit To Bend		
AEP7007		0		NOT SEALED				7:8		8.5					0		
Sensors																	
Sensor Type				Sensor-Bit (ft)						Note							
GAMMA				30.62													
DIRECTIONAL				36.00													
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)						
8.15	8.58	395.2		7.0	374.3	1,034.3	18.3	690.5	290.01	452.64	357.00						
Mud Checks																	
Time 1/15/2022 22:00		Mud Company PIONEER DRILLING FLUIDS				Type OIL BASE	Depth (ftKB) 16,557.0	Density (lb/gal) 8.25	Funnel Viscosity (s/qt) 67		T Flowline (° F) 0.0						
pV (cP) 13.0	YP (lb/100ft²) 11.000	Vis 3rpm 7	Vis 6rpm 8	Filtrate (mL/30min)			HTHP Filtrate (mL/30min) 14.0		HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0						
Solids (%) 6.5		Low Gravity Solids (%) 5.2				Sand (%)		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)					
Chlorides (mg/L) 21,000		Calcium (mg/L) 6,000.000			CaCl (ppm) 0		Oil Water Ratio 75.9/24.1		Electric Stab (V) 518.0		Lime (lb/bbl) 4.1		pH				
Gel 10 sec (lb/100ft²) 12.000				Gel 10 min (lb/100ft²) 19.000				Gel 30 min (lb/100ft²) 22.000									
Comment Maintain MW 8.0-8.2 ppg. Treatment in active: 1.20 ppb Lime, .45 ppb Gilsonite GP, 1.05 ppb calcium chloride, .25 primary, .25 secondary.																	
Last BOP Test																	
Date	Test Type	Item Tested	Next Test Date	Com													
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.													
Leak Off and Formation Integrity Tests																	
Test Type								Depth (ftKB)				Dens Fluid (lb/gal)					
FORMATION INTEGRITY								1,906.0				12.48					
FORMATION INTEGRITY								6,938.0				10.03					
Casing Pressure Test																	
Test Type	Test Subtype		Date			Item Tested						Failed?	Time (min)		P (psi)		
CASING	STANDARD		11/3/2021 12:00			SURFACE, 1,906.8ftKB						No	30.00		1,000.0		
CASING	STANDARD		1/8/2022 02:00			INTERMEDIATE, 6,938.7ftKB						No	30.00		2,500.0		
CASING	STANDARD		1/9/2022 00:15			INTERMEDIATE, 6,938.7ftKB						No	10.00		2,500.0		
Kick Offs & Key Depths																	
Date				Type			Top Depth (ftKB)				Depth Top (TVD) (ftKB)						
1/9/2022 21:30				KICK OFF			8,619.0				8,582.2						
1/11/2022 23:45				HEEL			9,588.0				9,168.7						
Casing Strings																	
Description			Set Depth (ftKB)			Set Depth (TVD) (ftKB)			OD (in)	Grade	Wt/Len (lb/ft)	Top Thread		P LeakOff (psi)			
CONDUCTOR			106.5						20	H40	78.67						
SURFACE			1,906.8			1,906.6			13 3/8	J55	54.50	BTC		1,235.1			
INTERMEDIATE			6,938.7			6,902.8			9 5/8	L80-IC	40.00	BTC		3,598.0			
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	14310	10100					10,800		58220					
DIESEL		FUEL	GAL		1962					7,138		28315					
WATER		FRESH	BBL	0	0		Meter reading 71,980			0		15079					
Mud Additive Amounts																	
Des					Type				Units	Rec	Consumed	On Loc	Cum Cons				
BULK TANK RENTAL					MISCELLANEOUS				DAY	1	1	0.0	11				
BARITE-BULK					WEIGHTING MATERIAL				TON		7	68.0	39				
BCI OBM PRIMARY					OIL MUD ADDITIVE				GAL		1	5.0	5				
BCI OBM SECONDARY					OIL MUD ADDITIVE				GAL		1	5.0	5				
CALCIUM CHORIDE-POWDER					SALT				SACK		35	70.0	220				
GILSOCOL GP					SPECIALITY				SACK		10	95.0	105				
LIME					ALKALINITY CONTROL				SACK		40	170.0	380				

Mud Additive Amounts								
Des		Type		Units	Rec	Consumed	On Loc	Cum Cons
SOLTEX		FLUID LOSS ADDITIVES		SACK		5	40.0	40
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
2	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
3	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081		6,000.0	
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)		Eff (%)	
No Data								
Deviation Surveys								
Date		Description			Job			
10/30/2021 06:00		AS DRILL SURVEY			ODR, 10/29/2021 12:30			
Survey Data - All surveys for 24 hr reporting period								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
16,221.00	90.77	163.89	9,131.30	7,366.69	-7,005.19	2,365.55	0.38	
16,316.00	90.88	163.92	9,129.93	7,461.60	-7,096.45	2,391.88	0.12	
16,410.00	91.13	165.01	9,128.28	7,555.54	-7,187.00	2,417.05	1.19	
16,505.00	91.33	166.03	9,126.24	7,650.51	-7,278.96	2,440.80	1.09	
Formations								
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)	
ILP		-6,195.0			9,189.5			
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5			
Daily Contacts								
Job Contact			Title		Office	Mobile	Email	
HARDIN, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT		361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM	
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT		432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER		972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER			ENGINEER		972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
LAWSON, JOHN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			337-380-2620	JOHN.LAWSON@PXD.COM	
CASTILLO, FERNANDO, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR			210-334-5154	FERNANDO.CASTILLO@PXD.COM	
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER			956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE			RIG PHONE		432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log								
Company								Count
PIONEER NATURAL RESOURCES USA INC								2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO								13
PIONEER NATURAL RESOURCES USA INC								1
ALTITUDE ENERGY PARTNERS INC								3
KAYDEN INDUSTRIES USA INC								1
STRATAGRAPH INC								2

H & P 645

Accept:1/5/2022

Release:

Days Since LTI:545.00

Days Since RI:545.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job:ODR

Report Date:1/17/2022

Report #:15

DFS:14

AFE #:9017696

Total AFE + Sup:\$2,911,162.04

Daily Field Est. (Cost):\$78,530.71

WELL/UWI 42-003-48472-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)			Field Name SPRABERRY (TREND AREA)										
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date 1/17/2022					
Jobs																	
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status		
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)																	
Type			Subtype					Date		Note							
MILESTONE			ESTIMATED PAD RELEASE					1/20/2022		3rd Well on 3 well Pad (1/16/22)							
Daily Operations																	
Footage/Meterage (ft) 2,668.00		Drilling Hours 21.67		% Rotating Time 100.00		End Depth (ftKB) 19,423.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$78,530.71		Cum Field Est To Date \$2,699,815.26					
24 HR ROP (ft/hr) 123.1		Circulating Hours		% Sliding Time 0.00		End Depth (TVD) (ftKB) 9,068.1		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$7,374.68		Cum Mud Field Est \$60,787.89		Total AFE + Sup \$2,911,162.04			
Daily Goal Description DRILLED FEET				Daily Goal - Last 24 2,000.0				Daily Goal - Next 24 0.0				Goal Comments Goal met					
Backbuild Yes		Lateral Inclination		Last Casing String INTERMEDIATE, 6,938.7ftKB					Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB								
Avg Connection Gas 292.00			Avg Trip Gas 78.00		Avg Background Gas 235.00			Max Connection Gas 403.00			Max Trip Gas 103.00		Max Drill Gas 471.00				
Operations Summary																	
Drill Production Lateral F/16,577' T/19,303', Perform K&M OB CUC (120') T/ 19,423' T.D., Circ hole clean (100% Rotate RSS, 0.72° avg lateral DLS, .76' below, 3.4' left of target line #6)																	
Operations Next Report Period																	
Circulate hole clean, Flow check, Pull 10 stands, Pump slug, L/D DP																	
Operations At Report Time																	
Circ hole clean at TD, Prepare to LD DP																	
Remarks																	
Surf: 100%																	
Int. 1: 100%																	
Prod. Vert.: 100%																	
Prod. Curve: 100%																	
Prod. Lateral: 100%																	
Covid-19: 0																	
Time Log																	
Start Time		Dur (hr)	End Time	Phase		Operation	Ops Category	Com			Start Depth (ftKB)		End Depth (ftKB)		Prob Hrs	Prob Ref #	
06:00		16.75	22:45	PROD, DRL LAT		DRL	NORMAL	Downlink RSS, Drill Production Lateral F/16,577' T/19,303', (2726' @ 162.74 '/hr) WOB 40-42, RPM 80-120, GPM 650, SPP 4250, DIFF 350-550, torq 17-22k			16,577.0		19,303.0				
22:45		6.25	05:00	PROD, POST DRL		DRL_K&M	NORMAL	Perform K&M OB CUC for last 120' at 20 fph F/ 19,303' T/ 19,423' T.D.			19,303.0		19,423.0				
05:00		1	06:00	PROD, POST DRL		K&M_CLEANUP	NORMAL	Circulate hole clean			19,423.0		19,423.0				
Drill Strings																	
BHA #5 , PRODUCTION - LATERAL																	
Bit Run 5				Drill Bit 8 1/2, DD506THX, 5321108					Bit Type PDC			Make GE/BAKER HUGHES					
Nozzles (1/32") 10/10/10/12/12/12				Bit Total Fluid Area (nozzles) (in²) 0.56			IADC Bit Dull -----			Hours Drilled By Bit (hr) 21.67			Depth Drilled By Bit (ft) 2,668.00				
BHA Drilling Time (hr) 21.67				BHA Depth Drilled (ft) 2,668.00			BHA ROP (ft/hr) 123.1			Depth In (ftKB) 16,755.0			Depth Out (ftKB) 19,423.0				
Drill String Components																	
Jts		Item Des				OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make					
604		DRILL PIPE				5	4.27	19,029.46	19,423.00	371,074.5	395	RIG					
4		HWDP				5	3.00	119.03	393.54	5,832.5	24	Rig					
1		REAMER - DRILL N' REAM				6 1/2	3.50	8.49	274.51		18	DRILLING TOOLS INTERNATIONAL					
5		HWDP				5	3.00	149.53	266.02	7,327.0	18	Rig					
1		MOTOR - STABILIZER SLEEVE				7	2.50	33.08	116.49	3,043.4	11	ALTITUDE ENERGY PARTNERS					
1		SUB - FILTER				6.43	2.88	5.80	83.41	539.4	8	STABIL DRILL					
1		ACCELERATOR				6 3/4	2.88	17.08	77.61	1,537.2	7	TOMAX					
1		DRILL COLLAR - PONY, NON MAG				6 3/4	3.00	9.02	60.53	838.9	5	STABIL DRILL					
1		STABILIZER				6 3/4	3.25	4.76	51.51	442.7	5	Amega West					
1		MWD TOOL - NON-RETRIEVABLE				6 3/4	3.25	28.39	46.75	2,640.3	4	Gordon					
1		SUB - UBHO				6 3/4	2.50	3.91	18.36	265.9	2	GORDON					
1		RSS TOOL				6 3/4	3.00	13.45	14.45	1,237.4	1	ALTITUDE ENERGY PARTNERS					
Mud Motors																	
SN		Bend Angle		Bearing Type			Lobe Config			# Stages		Lwr Defln Type		Bit To Bend			
AEP7007		0		NOT SEALED			7:8			8.5				0			
Sensors																	
Sensor Type				Sensor-Bit (ft)					Note								
GAMMA				30.62													
DIRECTIONAL				36.00													
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 (°)
07:20	12:00	16,755.0	1,055.00	226.1	42	120	750.0	650	4,750.0	226.1	205	234	167	205	21,000.0	5,000.0	
12:00	18:00	17,810.0	1,044.00	174.0	42	120	700.0	650	4,750.0	174.0	205	234	167	205	21,000.0	5,000.0	
18:00	22:45	18,854.0	449.00	94.5	42	100	700.0	650	4,750.0	94.5	205	234	167	205	21,000.0	5,000.0	
22:45	00:00	19,303.0	24.00	19.2	42	80	700.0	650	4,750.0	19.2	205	234	167	205	21,000.0	5,000.0	
00:00	05:00	19,327.0	96.00	19.2	42	60	200.0	650	4,750.0	19.2	205	234	167	205	21,000.0	5,000.0	

Hydraulic Calculations											
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.25	8.73	390.9		6.9	371.4	1,031.1	18.2	685.2	340.44	583.32	357.00
Mud Checks											
Time 1/16/2022 20:00		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 19,100.0	Density (lb/gal) 8.25	Funnel Viscosity (s/qt) 55		T Flowline (° F) 107.0	
pV (cP) 11.0	YP (lb/100ft²) 9.000	Vis 3rpm 6	Vis 6rpm 7	Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 12.0		HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0	
Solids (%) 6.8		Low Gravity Solids (%) 5.5			Sand (%) 0.0	MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)	
Chlorides (mg/L) 20,000		Calcium (mg/L) 6,000.000		CaCl (ppm) 20000000		Oil Water Ratio 79.3/20.7		Electric Stab (V) 648.0		Lime (lb/bbl) 3.4	pH
Gel 10 sec (lb/100ft²) 10.000				Gel 10 min (lb/100ft²) 18.000				Gel 30 min (lb/100ft²) 21.000			
Comment Maintain MW 8.0-8.2 ppg. Treatment in active: 1.75 ppb Lime, .73 ppb Gilsonite GP, 1.16 ppb calcium chloride, .23 primary, .23 secondary, 1.46 ppb Bentone											
Last BOP Test											
Date	Test Type	Item Tested	Next Test Date	Com							
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.							
Leak Off and Formation Integrity Tests											
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)			
FORMATION INTEGRITY						1,906.0		12.48			
FORMATION INTEGRITY						6,938.0		10.03			
Casing Pressure Test											
Test Type	Test Subtype		Date		Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD		11/3/2021 12:00		SURFACE, 1,906.8ftKB			No	30.00	1,000.0	
CASING	STANDARD		1/8/2022 02:00		INTERMEDIATE, 6,938.7ftKB			No	30.00	2,500.0	
CASING	STANDARD		1/9/2022 00:15		INTERMEDIATE, 6,938.7ftKB			No	10.00	2,500.0	
Kick Offs & Key Depths											
Date			Type		Top Depth (ftKB)			Depth Top (TVD) (ftKB)			
1/9/2022 21:30			KICK OFF		8,619.0			8,582.2			
1/11/2022 23:45			HEEL		9,588.0			9,168.7			
1/17/2022 05:00			TOE		19,423.0			9,068.1			
Casing Strings											
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wu/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR		106.5				20	H40	78.67			
SURFACE		1,906.8		1,906.6		13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE		6,938.7		6,902.8		9 5/8	L80-IC	40.00	BTC	3,598.0	
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		4800				6,000	63020	
WATER		FRESH	BBL	0	0		Meter reading 71,980		0	15079	
DIESEL		FUEL	GAL		3223				3,915	31538	
Mud Additive Amounts											
Des				Type			Units	Rec	Consumed	On Loc	Cum Cons
BULK TANK RENTAL				MISCELLANEOUS			DAY	1	1	0.0	12
BCI OBM PRIMARY				OIL MUD ADDITIVE			GAL		1	4.0	6
BCI OBM SECONDARY				OIL MUD ADDITIVE			GAL		1	4.0	6
SOLTEX				FLUID LOSS ADDITIVES			SACK		5	35.0	45
GILSOCOL GP				SPECIALITY			SACK		20	75.0	125
BENTONE 910				OIL MUD ADDITIVE			SACK		25	40.0	120
BENTONE 990				OIL MUD ADDITIVE			SACK		25	40.0	120
CALCIUM CHORIDE-POWDER				SALT			SACK		40	30.0	260
LIME				ALKALINITY CONTROL			SACK		60	110.0	440
Pump Operations											
Pump #	Make			Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)	
1	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
2	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
3	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0	
Pump Checks											
Pump #	Depth (ftKB)		Time		P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)	
2	18,811.0		1/16/2022 18:00		750.0	40		129		95	
2	18,811.0		1/16/2022 18:00		690.0	30		97		95	
2	18,811.0		1/16/2022 18:00		640.0	20		64		95	
3	18,811.0		1/16/2022 18:00		600.0	20		64		95	
3	18,811.0		1/16/2022 18:00		720.0	40		129		95	
3	18,811.0		1/16/2022 18:00		650.0	30		97		95	
Deviation Surveys											
Date 10/30/2021 06:00				Description AS DRILL SURVEY				Job ODR, 10/29/2021 12:30			
Survey Data - All surveys for 24 hr reporting period											
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)		VS (ft)		NS (ft)	EW (ft)		DLS (°/100ft)	
16,788.00	91.50	167.40	9,119.04		7,933.39		-7,554.45	2,505.16		0.20	
16,882.00	91.39	167.33	9,116.67		8,027.34		-7,646.14	2,525.72		0.14	
16,977.00	91.47	167.38	9,114.29		8,122.30		-7,738.81	2,546.51		0.10	
17,072.00	91.45	167.16	9,111.87		8,217.25		-7,831.44	2,567.43		0.23	
17,167.00	91.73	167.53	9,109.24		8,312.20		-7,924.10	2,588.24		0.49	
17,261.00	91.61	167.65	9,106.50		8,406.13		-8,015.86	2,608.43		0.18	
17,356.00	91.42	167.37	9,103.99		8,501.07		-8,108.58	2,628.97		0.36	
17,451.00	91.61	167.66	9,101.48		8,596.02		-8,201.30	2,649.50		0.36	
17,545.00	91.78	167.55	9,098.70		8,689.95		-8,293.07	2,669.67		0.22	
17,640.00	91.87	166.47	9,095.67		8,784.89		-8,385.59	2,691.01		1.14	
17,735.00	91.31	165.40	9,093.03		8,879.85		-8,477.71	2,714.09		1.27	
17,829.00	90.80	165.05	9,091.30		8,973.82		-8,568.58	2,738.06		0.66	

Survey Data - All surveys for 24 hr reporting period							
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
17,924.00	91.05	165.14	9,089.77	9,068.79	-8,660.37	2,762.49	0.28
18,018.00	91.22	165.47	9,087.91	9,162.76	-8,751.28	2,786.33	0.39
18,113.00	91.00	164.93	9,086.07	9,257.72	-8,843.11	2,810.59	0.61
18,208.00	91.28	165.08	9,084.18	9,352.68	-8,934.86	2,835.17	0.33
18,302.00	91.05	165.11	9,082.27	9,446.64	-9,025.68	2,859.34	0.25
18,397.00	92.06	165.16	9,079.69	9,541.59	-9,117.46	2,883.70	1.06
18,491.00	91.08	165.19	9,077.11	9,635.54	-9,208.30	2,907.74	1.04
18,586.00	91.08	165.81	9,075.32	9,730.51	-9,300.26	2,931.53	0.65
18,680.00	91.25	166.60	9,073.41	9,824.49	-9,391.52	2,953.94	0.86
18,775.00	90.77	167.04	9,071.74	9,919.47	-9,484.01	2,975.59	0.69
18,869.00	90.58	167.41	9,070.63	10,013.45	-9,575.67	2,996.38	0.44
18,963.00	89.09	166.41	9,070.90	10,107.44	-9,667.23	3,017.67	1.91
19,057.00	90.30	166.22	9,071.40	10,201.44	-9,758.56	3,039.90	1.30
19,152.00	90.49	167.02	9,070.74	10,296.43	-9,850.97	3,061.89	0.87
19,246.00	90.52	166.90	9,069.92	10,390.42	-9,942.55	3,083.09	0.13
19,341.00	90.63	167.46	9,068.96	10,485.40	-10,035.17	3,104.17	0.60
Formations							
Formation Name		Prog Top Override (TVD SS) (ft(elv))		Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
ILP		-6,195.0			9,189.5		
PBHL/TD		-6,125.0			9,119.5		
268_6_SPBY_L_B1/JO MILL		-6,263.0			9,257.5		
Daily Contacts							
Job Contact			Title	Office	Mobile	Email	
HARDIN, JOE, AREA DRILLING SUPERINTENDENT			AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM	
VILLESCAS, BERNIE, SUPERINTENDENT			SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER			ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER			ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
LAWSON, JOHN, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM	
THOMPSON, SCOTT, WELLSITE SUPERVISOR			WELLSITE SUPERVISOR		432-934-9393	SCOTT.THOMPSON@PXD.COM	
VELUETA, ALAN, MUD ENGINEER			MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE			RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log							
Company							Count
PIONEER NATURAL RESOURCES USA INC							2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO							13
PIONEER NATURAL RESOURCES USA INC							1
ALTITUDE ENERGY PARTNERS INC							3
KAYDEN INDUSTRIES USA INC							1
STRATAGRAPH INC							2

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 546.00

Days Since RI: 546.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/18/2022

Report #: 16

DFS: 15

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$83,254.00

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)			Field Name SPRABERRY (TREND AREA)								
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date 1/17/2022				
Jobs																
Responsible Grp 2						Responsible Grp 3			Job Type		Start Date		End Date		Job Status	
DRL ENG - ALEXANDER LINDBLAD						AREA TEAM 1			ODR		10/29/2021 12:30				IN PROGRESS	
Job Dates (ex. Estimated Pad Release, TXRRRC Calls)																
Type			Subtype						Date		Note					
MILESTONE			ESTIMATED PAD RELEASE						1/20/2022		3rd Well on 3 well Pad (1/16/22)					
Daily Operations																
Footage/Meterage (ft) 0.00			Drilling Hours		% Rotating Time		End Depth (ftKB) 19,423.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$83,254.00		Cum Field Est To Date \$2,783,069.26			
24 HR ROP (ft/hr)		Circulating Hours		% Sliding Time		End Depth (TVD) (ftKB) 9,068.0		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$3,868.97		Cum Mud Field Est \$64,656.86		Total AFE + Sup \$2,911,162.04		
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		Last Casing String INTERMEDIATE, 6,938.7ftKB						Next Casing String PROPOSED PRODUCTION, 19,471.0ftKB						
Avg Connection Gas 87.00			Avg Trip Gas 72.00		Avg Background Gas 79.00			Max Connection Gas 141.00			Max Trip Gas 81.00		Max Drill Gas 83.00			
Operations Summary Circ, Pull 10 stds, Pump slug, L/D DP, L/D BHA, R/U casing crew, Running 5 1/2" production casing T/ 210'																
Operations Next Report Period Run 5 1/2" production casing T/ 19,406', Rupture air lock, Bleed out air, Circ STS, Cement casing																
Operations At Report Time Running 5 1/2 production casing at 210'																
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 100%																
Covid-19: 0																
Time Log																
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #				
06:00	1.75	07:45	PROD, POST DRL	K&M_CLEANUP	NORMAL	CBU x 2.5 after CUC, SPR			19,423.0	19,423.0						
07:45	0.25	08:00	PROD, POST DRL	FLOW_CHK	NORMAL	Flow check, no flow			19,423.0	19,423.0						
08:00	1	09:00	PROD, POST DRL	TOOH_ELEV	NORMAL	TOOH wet 10 stands, hole slick.			19,423.0	19,423.0						
09:00	0.25	09:15	PROD, POST DRL	FLOW_CHK	NORMAL	Flow check, pump slug			19,423.0	19,423.0						
09:15	1.75	11:00	PROD, POST DRL	L/D DP	NORMAL	L/D DP to 16,686'. Correct fill observed in trip tanks			19,423.0	19,423.0						
11:00	0.5	11:30	PROD, POST DRL	RIG_SVC	NORMAL	Rig service, repair controls for pipe Wrangler.			19,423.0	19,423.0						
11:30	6.5	18:00	PROD, POST DRL	L/D DP	NORMAL	L/D DP F/ 16,686' T/ 6,720'. Correct fill observed in trip tanks			19,423.0	19,423.0						
18:00	0.25	18:15	PROD, POST DRL	SFTY	NORMAL	PJSM covering laying down DP			19,423.0	19,423.0						
18:15	2.75	21:00	PROD, POST DRL	L/D DP	NORMAL	L/D DP F/ 6,720' T/ 2,200', Correct fill observed in trip tanks			19,423.0	19,423.0						
21:00	0.5	21:30	PROD, POST DRL	HDL_ROTTHD	NORMAL	Remove rotating head, Install trip nipple			19,423.0	19,423.0						
21:30	2.75	00:15	PROD, POST DRL	L/D DP	NORMAL	L/D DP F/ 2,200' T/ 115', Correct fill observed in trip tanks (Using tongs, Tight connections)			19,423.0	19,423.0						
00:15	0.25	00:30	PROD, POST DRL	SFTY	NORMAL	PJSM covering BHA			19,423.0	19,423.0						
00:30	1.5	02:00	PROD, POST DRL	LD_DIR	NORMAL	L/D BHA, Graded bit 1-1-CT-S-X-0-NO-TD			19,423.0	19,423.0						
02:00	0.5	02:30	PROD, POST DRL	TIH_ELEV	NORMAL	TIH 13 stands in derrick			19,423.0	19,423.0						
02:30	1	03:30	PROD, POST DRL	L/D DP	NORMAL	L/D DP F/ 1,226' T/ surface			19,423.0	19,423.0						
03:30	0.25	03:45	PROD, POST DRL	RIG_SVC	NORMAL	Clean rig floor			19,423.0	19,423.0						
03:45	0.25	04:00	PROD, POST DRL	WRBSH	NORMAL	Remove wear bushing			19,423.0	19,423.0						
04:00	0.25	04:15	PROD, POST DRL	SFTY	NORMAL	PJSM covering casing running operations			19,423.0	19,423.0						
04:15	0.75	05:00	PROD, CASE & CMT	RU_CSG	NORMAL	R/U casing crew,CRT			19,423.0	19,423.0						
05:00	0.25	05:15	PROD, CASE & CMT	MU_SHOE_TRK	NORMAL	P/U shoe track, Pump through floats			19,423.0	19,423.0						
05:15	0.75	06:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Running 5 1/2" production casing at 210'			19,423.0	19,423.0						
Drill Strings																
BHA #5 , PRODUCTION - LATERAL																
Bit Run			Drill Bit 5 8 1/2, DD506THX, 5321108						Bit Type PDC			Make GE/BAKER HUGHES				

BHA #5 , PRODUCTION - LATERAL										
Nozzles (1/32") 10/10/10/12/12/12		Bit Total Fluid Area (nozzles) (in²) 0.56		IADC Bit Dull 1-1-CT-S-X-0-NO-TD		Hours Drilled By Bit (hr) 21.67		Depth Drilled By Bit (ft) 2,668.00		
BHA Drilling Time (hr) 21.67		BHA Depth Drilled (ft) 2,668.00		BHA ROP (ft/hr) 123.1		Depth In (ftKB) 16,755.0		Depth Out (ftKB) 19,423.0		
Drill String Components										
Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make		
604	DRILL PIPE	5	4.27	19,029.46	19,423.00	371,074.5	395	RIG		
4	HWDP	5	3.00	119.03	393.54	5,832.5	24	Rig		
1	REAMER - DRILL N' REAM	6 1/2	3.50	8.49	274.51		18	DRILLING TOOLS INTERNATIONAL		
5	HWDP	5	3.00	149.53	266.02	7,327.0	18	Rig		
1	MOTOR - STABILIZER SLEEVE	7	2.50	33.08	116.49	3,043.4	11	ALTITUDE ENERGY PARTNERS		
1	SUB - FILTER	6.43	2.88	5.80	83.41	539.4	8	STABIL DRILL		
1	ACCELERATOR	6 3/4	2.88	17.08	77.61	1,537.2	7	TOMAX		
1	DRILL COLLAR - PONY, NON MAG	6 3/4	3.00	9.02	60.53	838.9	5	STABIL DRILL		
1	STABILIZER	6 3/4	3.25	4.76	51.51	442.7	5	Amega West		
1	MWD TOOL - NON-RETRIEVABLE	6 3/4	3.25	28.39	46.75	2,640.3	4	Gordon		
1	SUB - UBHO	6 3/4	2.50	3.91	18.36	265.9	2	GORDON		
1	RSS TOOL	6 3/4	3.00	13.45	14.45	1,237.4	1	ALTITUDE ENERGY PARTNERS		
Mud Motors										
SN	Bend Angle	Bearing Type		Lobe Config		# Stages	Lwr Defln Type		Bit To Bend	
AEP7007	0	NOT SEALED		7:8		8.5			0	
Sensors										
Sensor Type		Sensor-Bit (ft)				Note				
GAMMA		30.62								
DIRECTIONAL		36.00								
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 1/17/2022 20:00		Mud Company PIONEER DRILLING FLUIDS			Type OIL BASE	Depth (ftKB) 19,423.0	Density (lb/gal) 8.25	Funnel Viscosity (s/qt) 57	T Flowline (° F)	
pV (cP) 11.0	YP (lb/100ft²) 9.000	Vis 3rpm 6	Vis 6rpm 7	Filtrate (mL/30min)	HTHP Filtrate (mL/30min) 14.0		HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0	
Solids (%) 6.9		Low Gravity Solids (%) 5.9			Sand (%) 0.0	MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)
Chlorides (mg/L) 20,000		Calcium (mg/L) 6,000.000		CaCl (ppm) 20000000	Oil Water Ratio 78.4/21.6		Electric Stab (V) 608.0		Lime (lb/bbl) 3.4	pH
Gel 10 sec (lb/100ft²) 11.000				Gel 10 min (lb/100ft²) 18.000				Gel 30 min (lb/100ft²) 21.000		
Comment Maintain MW 8.0-8.2 ppg. Treatment in active: 1.75 ppb Lime, .73 ppb Gilsonite GP, 1.16 ppb calcium chloride, .23 primary, .23 secondary, 1.46 ppb Bentone										
Last BOP Test										
Date	Test Type	Item Tested	Next Test Date	Com						
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.						
Leak Off and Formation Integrity Tests										
Test Type						Depth (ftKB)		Dens Fluid (lb/gal)		
FORMATION INTEGRITY						1,906.0		12.48		
FORMATION INTEGRITY						6,938.0		10.03		
Casing Pressure Test										
Test Type	Test Subtype	Date		Item Tested			Failed?	Time (min)	P (psi)	
CASING	STANDARD	11/3/2021 12:00		SURFACE, 1,906.8ftKB			No	30.00	1,000.0	
CASING	STANDARD	1/8/2022 02:00		INTERMEDIATE, 6,938.7ftKB			No	30.00	2,500.0	
CASING	STANDARD	1/9/2022 00:15		INTERMEDIATE, 6,938.7ftKB			No	10.00	2,500.0	
Kick Offs & Key Depths										
Date			Type		Top Depth (ftKB)		Depth Top (TVD) (ftKB)			
1/9/2022 21:30			KICK OFF		8,619.0		8,582.2			
1/11/2022 23:45			HEEL		9,588.0		9,168.7			
1/17/2022 05:00			TOE		19,423.0		9,068.0			
Casing Strings										
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR		106.5				20	H40	78.67		
SURFACE		1,906.8		1,906.6		13 3/8	J55	54.50	BTC	1,235.1
INTERMEDIATE		6,938.7		6,902.8		9 5/8	L80-IC	40.00	BTC	3,598.0
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		1000			5,000	64020	
DIESEL		FUEL	GAL	3753	1306		Tkt# 68606	6,362	32844	
WATER		FRESH	BBL	0	0		Meter reading 71,980	0	15079	
Mud Additive Amounts										
Des				Type			Units	Rec	Consumed	On Loc
BCI OBM RHEO MODIFIER				OIL MUD ADDITIVE			GAL		1	1.0
OIL DRY				OIL MUD ADDITIVE			SACK	50	3	47.0
BARITE-BULK				WEIGHTING MATERIAL			TON		8	60.0
BENTONE 910				OIL MUD ADDITIVE			SACK		10	30.0
BENTONE 990				OIL MUD ADDITIVE			SACK		10	30.0
Pump Operations										
Pump #	Make			Model	Liner Size (in)		Stroke (in)	Vol/Stk (bbl/stk)		P Max (psi)
1	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0
2	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0
3	GARDNER-DENVER			PZ-11	5 1/2		10.98	0.081		6,000.0
Pump Checks										
Pump #		Depth (ftKB)		Time	P (psi)	Strokes (spm)		Q Flow (gpm)		Eff (%)
No Data										
Deviation Surveys										
Date 10/30/2021 06:00				Description AS DRILL SURVEY				Job ODR, 10/29/2021 12:30		

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	-6,195.0		9,189.5		
PBHL/TD	-6,125.0		9,119.5		
268_6_SPBY_L_B1/JO MILL	-6,263.0		9,257.5		
Daily Contacts					
Job Contact	Title	Office	Mobile	Email	
HARDIN, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM	
VILLESCAS, BERNIE, SUPERINTENDENT	SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM	
LINDBLAD, ALEXANDER, ENGINEER	ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM	
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM	
LAWSON, JOHN, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM	
THOMPSON, SCOTT, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		432-934-9393	SCOTT.THOMPSON@PXD.COM	
VELUETA, ALAN, MUD ENGINEER	MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM	
RIG-H&P 645, RIG PHONE	RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM	
Personnel Log					
Company					Count
PIONEER NATURAL RESOURCES USA INC					2
HELMERICH & PAYNE INTERNATIONAL DRILLING CO					13
PIONEER NATURAL RESOURCES USA INC					1
ALTITUDE ENERGY PARTNERS INC					3
KAYDEN INDUSTRIES USA INC					1
STRATAGRAPH INC					2
TCI CASING SPECIALTIES LLC					4
TENARIS GLOBAL SERVICES USA					2
TEXAS TORQUE TURN OILFIELD SERVICES LLC					2
WEATHERFORD INTERNATIONAL LLC					1

H & P 645

Accept: 1/5/2022

Release:

Days Since LTI: 547.00

Days Since RI: 547.00

Daily Drilling Report

PERMIAN ASSET TEAM

Job: ODR

Report Date: 1/19/2022

Report #: 17

DFS: 16

AFE #: 9017696

Total AFE + Sup: \$2,911,162.04

Daily Field Est. (Cost): \$104,593.03

API/UWI 42-003-48472-0000			Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY A5 (SBPY L A5)				Field Name SPRABERRY (TREND AREA)					
SSN ID00038659		Property Sub		KB-Grd (ft) 26.50		Orig KB Elevation (ft) 2,994.50		Ground Elevation (ft) 2,968.00		Spud Date 10/29/2021		TD Date 1/17/2022		
Jobs														
Responsible Grp 2					Responsible Grp 3			Job Type	Start Date		End Date	Job Status		
DRL ENG - ALEXANDER LINDBLAD					AREA TEAM 1			ODR	10/29/2021 12:30			IN PROGRESS		
Job Dates (ex. Estimated Pad Release, TXRRC Calls)														
Type		Subtype				Date			Note					
MILESTONE		ESTIMATED PAD RELEASE				1/20/2022			3rd Well on 3 well Pad (1/16/22)					
TXRRC CALL		CEMENT PROD				1/18/2022 11:30			Virginia					
Daily Operations														
Footage/Meterage (ft) 0.00		Drilling Hours		% Rotating Time		End Depth (ftKB) 19,423.0		Target Depth (ftKB) 19,471.0		Daily Field Est Total \$104,593.03		Cum Field Est To Date \$2,856,862.29		
24 HR ROP (ft/hr)	Circulating Hours		% Sliding Time	End Depth (TVD) (ftKB) 9,068.0		Target Depth Depth (TVD) (ftKB) 9,119.2		Daily Mud Field Est Total \$		Cum Mud Field Est \$64,656.86		Total AFE + Sup \$2,911,162.04		
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		Last Casing String PRODUCTION, 19,406.8ftKB					Next Casing String . ftKB						
Avg Connection Gas 0.00		Avg Trip Gas 45.00		Avg Background Gas 25.00		Max Connection Gas 0.00		Max Trip Gas 51.00		Max Drill Gas 0.00				
Operations Summary Run 5 1/2" production casing T/ 19,406', Rupture air lock, Bleed out air, Circ STS, R/U SLB, Cementing production casing at report time														
Operations Next Report Period Finish cementing production casing, Set pack off and test, Nipple down BOP, Install TA cap, R/D, Prepare for rig move														
Operations At Report Time Cement 5 1/2 production casing, Pumping tail cmt at report time														
Remarks Surf: 100% Int. 1: 100% Prod. Vert.: 100% Prod. Curve: 100% Prod. Lateral: 100% Covid-19: 0														
Time Log														
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com			Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #		
06:00	12	18:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5 1/2 production casing F/ 210' T/ 15,217'. Proper displacement monitored in trip tanks			19,423.0	19,423.0				
18:00	0.25	18:15	PROD, CASE & CMT	SFTY	NORMAL	PJSM on running casing			19,423.0	19,423.0				
18:15	2.25	20:30	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5 1/2 production casing F/ 15,217 T/ 18,758'. Proper displacement monitored in trip tanks			19,423.0	19,423.0				
20:30	0.5	21:00	PROD, CASE & CMT	RIG_SVC	NORMAL	Rig service, Repair hydraulic leak on PDS			19,423.0	19,423.0				
21:00	0.5	21:30	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	Run 5 1/2 production casing F/ 19,758 T/ 19,368'. Proper displacement monitored in trip tanks			19,423.0	19,423.0				
21:30	0.25	21:45	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	P/U landing JT and land casing on hanger at 19,406' (160k on hanger)			19,423.0	19,423.0				
21:45	0.25	22:00	PROD, CASE & CMT	SFTY	NORMAL	PJSM on rigging down casing crew			19,423.0	19,423.0				
22:00	0.5	22:30	PROD, CASE & CMT	RD_CSG	NORMAL	R/D casing crew			19,423.0	19,423.0				
22:30	0.75	23:15	PROD, CASE & CMT	RU_CMT	NORMAL	R/U cement head and steel lines to rupture air lock. (Change leaking O-ring on cement head)			19,423.0	19,423.0				
23:15	1.5	00:45	PROD, CASE & CMT	CIRC	NORMAL	Rupture air lock w/ 3,525 psi, Bleed out air, Fill casing			19,423.0	19,423.0				
00:45	2.75	03:30	PROD, CASE & CMT	CIRC	NORMAL	Circulate STS through seperator			19,423.0	19,423.0				
03:30	0.25	03:45	PROD, CASE & CMT	SFTY	NORMAL	PJSM with Schlumberger			19,423.0	19,423.0				
03:45	0.25	04:00	PROD, CASE & CMT	RU_CMT	NORMAL	R/U Schlumberger			19,423.0	19,423.0				
04:00	2	06:00	PROD, CASE & CMT	CMT	NORMAL	Pressure test lines to 7500#, Pump 50 bbl,10# MPE, Pump lead cement, Pumping tail cement at report time			19,423.0					
Hydraulic Calculations														
Dens Mud (lb/gal)		ECD End (lb/gal)		Bit Hydraulic Power (hp)		HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)		Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
Mud Checks														
Time 1/18/2022 22:00		Mud Company PIONEER DRILLING FLUIDS				Type OIL BASE		Depth (ftKB) 19,423.0		Density (lb/gal) 8.25		Funnel Viscosity (s/qt) 57		T Flowline (° F)
pV (cP) 11.0	YP (lb/100ft²) 9.000		Vis 3rpm 6	Vis 6rpm 7	Filtrate (mL/30min)		HTHP Filtrate (mL/30min) 14.0			HTHP Temperature (° F) 200.0		HTHP Pressure (psi) 500.0		
Solids (%) 6.9		Low Gravity Solids (%) 5.9				Sand (%) 0.0		MBT (lb/bbl)		Pm (mL/mL)		Pf (mL/mL)		
Chlorides (mg/L) 20,000			Calcium (mg/L) 6,000.000		CaCl (ppm) 20000000		Oil Water Ratio 78.4/21.6		Electric Stab (V) 608.0		Lime (lb/bbl) 3.4		pH	
Gel 10 sec (lb/100ft²) 11.000					Gel 10 min (lb/100ft²) 18.000				Gel 30 min (lb/100ft²) 21.000					
Comment No treatments														

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Last BOP Test								
Date	Test Type	Item Tested	Next Test Date	Com				
1/5/2022 06:00	BOP	BOP'S, 1/5/2022 06:00	1/26/2022 06:00	Tested all rams and valves 250 psi low and 5000 psi high, Annular 250 psi low and 3500 psi high. Back to mud pumps 250 psi low and 6300 psi high. All test held 5 mins. No Failures.				
Leak Off and Formation Integrity Tests								
Test Type			Depth (ftKB)	Dens Fluid (lb/gal)				
FORMATION INTEGRITY			1,906.0	12.48				
FORMATION INTEGRITY			6,938.0	10.03				
Casing Pressure Test								
Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)		
CASING	STANDARD	11/3/2021 12:00	SURFACE, 1,906.8ftKB	No	30.00	1,000.0		
CASING	STANDARD	1/8/2022 02:00	INTERMEDIATE, 6,938.7ftKB	No	30.00	2,500.0		
CASING	STANDARD	1/9/2022 00:15	INTERMEDIATE, 6,938.7ftKB	No	10.00	2,500.0		
Kick Offs & Key Depths								
Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)					
1/9/2022 21:30	KICK OFF	8,619.0	8,582.2					
1/11/2022 23:45	HEEL	9,588.0	9,168.7					
1/17/2022 05:00	TOE	19,423.0	9,068.0					
Casing Strings								
Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)	
CONDUCTOR	106.5		20	H40	78.67			
SURFACE	1,906.8	1,906.6	13 3/8	J55	54.50	BTC	1,235.1	
INTERMEDIATE	6,938.7	6,902.8	9 5/8	L80-IC	40.00	BTC	3,598.0	
PRODUCTION	19,406.8	9,068.2	5 1/2	P110-IC	20.00	WEDGE 441		
Gas Emissions - Flare								
Type	Method	Dur (Min)	Amount	Units	Com			
No Data								
Job Supply Amounts								
Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL		3000			2,000	67020
DIESEL	FUEL	GAL		1339			5,023	34183
Mud Additive Amounts								
Des	Type	Units	Rec	Consumed	On Loc	Cum Cons		
Pump Operations								
Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)		
1	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
2	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
3	GARDNER-DENVER	PZ-11	5 1/2	10.98	0.081	6,000.0		
Pump Checks								
Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)		
No Data								
Deviation Surveys								
Date		Description			Job			
10/30/2021 06:00		AS DRILL SURVEY			ODR, 10/29/2021 12:30			
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	-6,195.0		9,189.5					
PBHL/TD	-6,125.0		9,119.5					
268_6_SPBY_L_B1/JO MILL	-6,263.0		9,257.5					
Daily Contacts								
Job Contact		Title	Office	Mobile	Email			
HARDIN, JOE, AREA DRILLING SUPERINTENDENT		AREA DRILLING SUPERINTENDENT	361-452-2118	361-318-8762	THOMAS.HARDIN@PXD.COM			
VILLESCAS, BERNIE, SUPERINTENDENT		SUPERINTENDENT	432-571-2950	432-312-2088	BERNIE.VILLESCAS@PXD.COM			
LINDBLAD, ALEXANDER, ENGINEER		ENGINEER	972-969-1749		ALEXANDER.LINDBLAD@PXD.COM			
COX, BRYAN, ENGINEER		ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM			
LAWSON, JOHN, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		337-380-2620	JOHN.LAWSON@PXD.COM			
THOMPSON, SCOTT, WELLSITE SUPERVISOR		WELLSITE SUPERVISOR		432-934-9393	SCOTT.THOMPSON@PXD.COM			
VELUETA, ALAN, MUD ENGINEER		MUD ENGINEER		956-652-8239	ALAN.VELUETA@PXD.COM			
RIG-H&P 645, RIG PHONE		RIG PHONE	432-200-9593	432-894-8893	DL-HP645@PXD.COM			
Personnel Log								
Company						Count		
PIONEER NATURAL RESOURCES USA INC						2		
HELMERICH & PAYNE INTERNATIONAL DRILLING CO						13		
PIONEER NATURAL RESOURCES USA INC						1		
ALTITUDE ENERGY PARTNERS INC						3		
KAYDEN INDUSTRIES USA INC						1		
STRATAGRAPH INC						2		
TCI CASING SPECIALTIES LLC						4		
TENARIS GLOBAL SERVICES USA						2		
TEXAS TORQUE TURN OILFIELD SERVICES LLC						2		
WEATHERFORD INTERNATIONAL LLC						1		
ARSENAL DOWNHOLE SOLUTIONS LLC						1		
SCHLUMBERGER TECHNOLOGY CORPORATION						4		
TRIFECTA OILFIELD SERVICES LLC						5		
TRIFECTA OILFIELD SERVICES LLC						2		