PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	876.00
Days Since RI:	876.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	12/30/2022
Report #:	4
DFS:	2
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$148,004.31

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	5th Intermediate of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
565.00	7.25	79.31	2,601.0	19,619.0	$148,004.31	$599,614.73

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
77.9		20.69	2,595.8	8,963.1	$	$	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	0.0	3,000.0	Goal Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		SURFACE, 2,016.7ftKB	PROPOSED INTERMEDIATE, 6,948.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
3.00	0.00	2.00	3.00	0.00	2.00

Operations Summary

Walk Rig From University 6-48A 101H T/University 6-48B 102H, N/U BOP, Peform FULL BOP Test, P/U and TIH W/12 1/4" Intermediate Drilling Assembly, Drill Out Shoe Track, Rathole and 10' New Formation, Perfrom FIT T/12.5# EMW, Drill Intermediate Section F/2,046' T/2,601' Building 13° Tangent. (INC - 8.93°, AZI - 254.46°, Above - 1.7', Right - .5')

Operations Next Report Period

Drill Intermediate Section F/2,601' T/5,601'

Operations At Report Time

Drilling Intermediate Section @ 2,601' Building and Holding 13° Tangent

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 0 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 0 Total hr
Surf-100%, Int 1- 11.48%, Curve- 0%, Prod Lat- 0%

Time Log

Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
13:00	0.25	13:15	MOB, RIG UP	SFTY	NORMAL	PJSM for Skidding Rig	2,036.0	2,036.0		
13:15	0.5	13:45	MOB, RIG UP	SKID	NORMAL	Walk rig F/University 6-48A 101H well.	2,036.0	2,036.0		
13:45	0.5	14:15	MOB, RIG UP	NU_BOPE	NORMAL	Remove TA cap and N/U BOP	2,036.0	2,036.0		
14:15	2.25	16:30	MOB, RIG UP	TEST_BOPE	NORMAL	Perform FULL test on BOP 250-5,000 psi for 5-5 minutes, 250-3,500 psi for 5-5 minutes, 250-5,500 psi for 5-5 minutes.	2,036.0	2,036.0		
16:30	0.5	17:00	INT, PRE DRL	WRBSH	NORMAL	M/U wearbushing retrieval tool and set wearbushing in wellhead.	2,036.0	2,036.0		
17:00	0.25	17:15	INT, PRE DRL	SFTY	NORMAL	Hold PJSM with all personnel on picking up directional components.	2,036.0	2,036.0		
17:15	1.75	19:00	INT, PRE DRL	PU_ DIR	NORMAL	P/U directional components as per Baker directional.	2,036.0	2,036.0		
19:00	0.25	19:15	INT, PRE DRL	CIRC	NORMAL	Fill pipe and test directional components.	2,036.0	2,036.0		
19:15	0.5	19:45	INT, PRE DRL	RIG_SVC	NORMAL	Service and inspect drill floor equipment.	2,036.0	2,036.0		
19:45	0.75	20:30	INT, PRE DRL	HDL_BHA	NORMAL	TIH F/482 T/1,386' with stands of 5" HWDP from the derrick.	2,036.0	2,036.0		
20:30	0.25	20:45	INT, PRE DRL	TIH_ELEV	NORMAL	TIH F/1,386' T/1,972' tagging float collar. Monitoring displacements on trip tanks.	2,036.0	2,036.0		
20:45	0.5	21:15	INT, PRE DRL	HDL_ROTHD	NORMAL	Remove trip nipple and install rotating head assembly	2,036.0	2,036.0		
21:15	0.5	21:45	INT, PRE DRL	DRL_OUT	NORMAL	Drill out shoe track and rathole T/2,036'.	2,036.0	2,036.0		
21:45	0.25	22:00	INT, PRE DRL	DRL	NORMAL	Drill 10' new formation F/2,036' T/2,046'.	2,036.0	2,046.0		
22:00	0.25	22:15	INT, PRE DRL	CIRC	NORMAL	Circulate prior to performing FIT	2,046.0	2,046.0		

22:15	0.25	22:30	INT, PRE DRL	FIT	NORMAL	Perform FIT T/12.5# EMW	2,046.0	2,046.0		
22:30	7.5	06:00	INT, DRL	DRL_OUT	NORMAL	Drill Intermediate Section F/2,046' T/2601' Building 13° Tangent (555' @ 74 fph) Pumping @ 1,000 GPM w/4,450 psi, Rotating @ 50 RPM w/15-18K torque, 35K WOB and 700 psi Diff.	2,046.0	2,601.0		

Drill Strings

BHA #2 , INTERMEDIATE

Bit Run	Drill Bit		Bit Type	Make
2	12 1/4, SPL616, 59774		PDC	ULTERRA
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in^2)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
11/11/11/11/11/11/13/13/13	0.95	-------	7.25	565.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
7.25	565.00	77.9	2,036.0	2,601.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
27	DRILL PIPE	5	4.28	1,214.97	2,601.00	23,691.9	69	RIG
2	HWDP	5	2.88	60.96	1,386.03	3,169.9	45	RIG
1	DRILLING JARS - HYDRAULIC	7 1/8	2.63	30.91	1,325.07		42	COUGAR
27	HWDP	5	2.88	811.49	1,294.16	42,197.5	42	RIG
1	SUB - XO	7 7/8	2.75	3.20	482.67		0	RIG
12	DRILL COLLAR - SPIRALED	8.06	2.88	364.57	479.47		0	RIG
1	SUB - XO	8	3.25	4.44	114.90		0	DRILLING TOOLS INTERNATIONAL
1	SUB - FILTER	8 1/4	3.25	3.45	110.46		0	GE/BAKER HUGHES
1	DRILL COLLAR - NON MAG	8	3.25	28.23	107.01		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	8	3.25	34.70	78.78		0	GE/BAKER HUGHES
1	STABILIZER	8 9/32	2.56	6.10	44.08		0	DRILLING TOOLS INTERNATIONAL
1	MOTOR - STABILIZER SLEEVE	9 1/2	3.25	36.63	37.98		0	PHOENIX

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
PHX900025	1.5	NOT SEALED	7:8	7		6.77

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	57.13	
DIRECTIONAL	60.53	

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 (°)
21:45	22:00	2,036.0	10.00	40.0	11	40	254.4	612	1,933.0	68.0	130	130	130	130	6.0	6.0	
22:30	23:00	2,046.0	58.00	116.0	19	30	360.2	706	2,510.0	125.0	120	120	120	120	8.0	8.0	
23:15	23:45	2,104.0	22.00	44.0	10	0	202.6	706	2,352.0	53.0	129	129	129	129	0.0	0.0	
23:45	00:00	2,126.0	69.00	276.0	24	48	384.9	706	2,594.0	174.0	120	120	120	120	10.0	10.0	
00:15	01:00	2,195.0	34.00	45.3	10	0	134.2	853	3,100.0	57.0	133	133	133	133	0.0	0.0	
01:00	01:15	2,229.0	56.00	224.0	23	50	571.5	853	3,537.0	318.0	115	115	115	115	12.0	12.0	
01:15	01:30	2,285.0	12.00	48.0	9	0	109.6	853	3,075.0	43.0	132	132	132	132	0.0	0.0	
01:30	06:00	2,297.0	304.00	67.6	9	50	109.6	990	4,450.0	67.5	132	132	132	132	12.0	12.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in^2)	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)
10.70	10.79	631.4	5.4	335.9	1,093.3	27.7	405.7	32.92	54.21	259.55

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
12/29/2022 23:00	PIONEER DRILLING FLUIDS	WATER BASE	2,100.0	10.70	34	95.0

pV (cP)	YP ($lbf/100ft^2$)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
11.0	7.000	3	4	16.0	0.0	0.0	0.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
21.0	4.7	0.2	5.0	0.000	0.2

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
135,000	600.000	0	8.2/91.8	0.0	0.1	10.0

Gel 10 sec ($lbf/100ft^2$)	Gel 10 min ($lbf/100ft^2$)	Gel 30 min ($lbf/100ft^2$)
5.000	7.000	8.000

Comment

Recommeded Fluid Treatment: Maintain 10.6-10.7ppg MW w/ whole mud dilution. Treatment: 3/4 ppb Soda Ash, 1/4 ppb Xan, 1/2 ppb Pac LV, 1/2 ppb Soltex, 5% Diesel.

Drilling Fluid Activity Last 24 Hrs: Use pre built WBM as needed for volume. Xfer all product t/ the 102H. No fresh water use on this section all dilution f/ reserve, & whole mud.

Rig Activity Last 24 Hours: Finish skidding rig t/ the 102H. Performed full BOP test. P/U BHA #1. TIH T/1,972' Tag & drill Float Collar, Shoe & 10' of new formation. Perform FIT T/12.5 EMW. Slide/Drill f/2,046' t/2,100'. Drilling parameters: ROP- 190', WOB-21K, Rotary- 50 RPM, Bit- 127 RPM, Torque- 10 KLB-Ft, Diff- 350 PSI. P/U 160k, S/O 155k, ROT 160K. Lithology @ 2,046' 10% CMT, 90%RSH. Currently drilling INT at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com

12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	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	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6

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	9504	0		Transferred from' UNIVERSITY 6-48A 101H'	9,504	0
DIESEL	FUEL	GAL	19990	0		Winter Tank	19,990	0
DIESEL	FUEL	GAL	9218	1463		Transferred from' UNIVERSITY 6-48A 101H'	7,755	2354
WATER	FRESH	BBL	4213	4213		Initial Reading: 72,681 Final Reading: 76,894	0	11630

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	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
1	2,559.0	12/30/2022 04:30	150.0	20	70	95
1	2,559.0	12/30/2022 04:30	240.0	40	141	95
1	2,559.0	12/30/2022 04:30	200.0	30	106	95
2	2,559.0	12/30/2022 04:30	170.0	30	106	95
2	2,559.0	12/30/2022 04:30	220.0	40	141	95
2	2,559.0	12/30/2022 04:30	140.0	20	70	95
3	2,559.0	12/30/2022 04:30	140.0	20	70	95
3	2,559.0	12/30/2022 04:30	220.0	40	141	95
3	2,559.0	12/30/2022 04:30	170.0	30	106	95

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
2,044.00	1.89	247.09	2,042.24	10.06	-27.03	-66.22	0.40
2,134.00	2.71	247.85	2,132.17	10.58	-28.41	-69.56	0.91
2,224.00	4.21	245.21	2,222.00	11.49	-30.60	-74.53	1.68
2,315.00	5.96	245.65	2,312.64	12.95	-33.94	-81.86	1.92
2,406.00	7.72	248.38	2,402.99	14.58	-38.14	-91.85	1.97
2,496.00	8.93	254.46	2,492.04	15.55	-42.24	-104.20	1.66

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
255_0_TNSL_TOP_DOL	-90.0		3,083.0	3,070.0	
256_0_YATES	-132.0		3,125.0	3,152.0	
257_0_SEVEN RIVERS	-434.0		3,427.0	3,425.0	
258_0_QUEEN	-1,102.0		4,095.0	4,101.0	
259_0_GRAYBURG	-1,611.0		4,604.0	4,563.0	
261_0_SAN ANDRES	-1,802.0		4,795.0	4,740.0	
263_5_Top_Cherry_Canyon	-2,697.0		5,690.0	5,684.0	
264_5_TOP_BRUSHY_CANYON	-3,594.0		6,587.0		
265_0_CLEARFORK/POP	-3,815.0		6,808.0	6,851.0	
ICP1	-3,865.0		6,858.0		
267_0_SPBY_U_A1/267_0_SPBY	-5,443.0		8,436.0	8,493.0	
ALT_ICP2	-5,493.0		8,486.0		
267_5_SPBY_M_A1	-5,755.0		8,748.0	8,807.0	
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	

268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	
ILP	-5,920.0		8,913.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

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UNIVERSITY 6-48B 102H

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Report #:	7
DFS:	5
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$66,435.50

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	5th Intermediate of a 5 well pad, Batch Drilling.
TXRRC CALL	CEMENT INT	1/1/2023 11:20	Audry #2

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
510.00	5.00	100.00	6,965.0	19,619.0	$66,435.50	$1,378,733.88

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
102.0	1.50	0.00	6,863.5	8,963.1	$11,913.81	$31,475.18	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	510.0	500.0	Goal Met TD

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		SURFACE, 2,016.7ftKB	INTERMEDIATE, 6,950.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
35.00	0.00	25.00	75.00	0.00	61.00

Operations Summary

Drill Intermediate T/TD @ 6,965', Circulate Hole Clean & Spot Pad Mud, TOOH T/5,553', Backream T/5,200', TOOH, L/D 8" DC and Directional Components, RIH W/9 5/8" Casing T/1,500'.

Operations Next Report Period

TIH and Land 9 5/8" Intermediate Casing, Circulate 1.5x Capacity, R/U and Cement Intermediate, Install and Test Packoff, P/U 8 3/4" Vertical Assembly, TIH, Test Casing To 2500 psi, Drill Out Shoe Track and 10' Formation, FIT To 9.5#, Drill 8 3/4" Vertical Section T/7,465'.

Operations At Report Time

TIH @ 1,500' W/9 5/8" Intermediate Casing

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 0%, Prod Lat- 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	INT, DRL	DRL	NORMAL	Drill Intermediate Section F/ 6,455' T/6,965' (510' @ 102 fph) Pumping @ 950 GPM w/4,400 psi, Rotating @ 60 RPM w/18-22K torque, 40-45K WOB and 500 psi Diff. Note: Began dropping back to vertical at 5,900'	6,455.0	6,965.0		
11:00	1.5	12:30	INT, POST DRL	CIRC	NORMAL	Circulate 2 sweeps STS & spot pad mud ***Calculate 9% washout***	6,965.0	6,965.0		
12:30	0.25	12:45	INT, POST DRL	FLOW_CHK	NORMAL	Flow Check (static)	6,965.0	6,965.0		
12:45	2	14:45	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/ 6,965' T/ 5,553', hole taking proper fill ***Tight spot @ 5553', unable to pull on elevators***	6,965.0	6,965.0		
14:45	5.5	20:15	INT, POST DRL	TOOH_NONELEV	NORMAL	Wash and Ream F/ 5,553' T/ 5,230', 800 GPMs, 50 RPM, Tq 6-23K, Full Returns	6,965.0	6,965.0		
20:15	4	00:15	INT, POST DRL	TOOH_ELEV	NORMAL	TOOH F/ 5,230 T/ 479', hole taking proper fill	6,965.0	6,965.0		
00:15	0.75	01:00	INT, POST DRL	L/D BHA	NORMAL	L/D 8" DCs F/482' T/114', hole taking proper fill	6,965.0	6,965.0		
01:00	0.25	01:15	INT, POST DRL	SFTY	NORMAL	PJSM on laying down directional tools	6,965.0	6,965.0		
01:15	0.75	02:00	INT, POST DRL	LD_DIR	NORMAL	L/D Directional components	6,965.0	6,965.0		
02:00	0.25	02:15	INT, POST DRL	WRBSH	NORMAL	Pull wear bushing/ Clean rig floor	6,965.0	6,965.0		
02:15	0.5	02:45	INT, POST DRL	RIG_SVC	NORMAL	Service and inspect drill floor equipment	6,965.0	6,965.0		
02:45	0.25	03:00	INT, POST DRL	SFTY	NORMAL	PJSM on rigging up and running 9 5/8" casing	6,965.0	6,965.0		
03:00	0.5	03:30	INT, CASE & CMT	RU_CSG	NORMAL	R/U and function test casing equipment	6,965.0	6,965.0		

03:30	0.25	03:45	INT, CASE & CMT	MU_SHOE_TRK	NORMAL	M/U 2 joint shoe track and ensure circulation through same	6,965.0	6,965.0		
03:45	2.25	06:00	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	RIH with 9 5/8" casing F/91' T/1,500'. Monitoring displacements on trip tanks. Hole giving proper displacement.	6,965.0	6,965.0		

Drill Strings

BHA #2 , INTERMEDIATE

Bit Run	Drill Bit		Bit Type	Make
2	12 1/4, SPL616, 59774		PDC	ULTERRA
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in^2)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
11/11/11/11/11/11/13/13/13	0.95	1-2-BT-S-X-0-CT-TD	53.75	4,929.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
53.75	4,929.00	91.7	2,036.0	6,965.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
124	DRILL PIPE	5	4.28	5,578.97	6,965.00	108,789.9	154	RIG
2	HWDP	5	2.88	60.96	1,386.03	3,169.9	45	RIG
1	DRILLING JARS - HYDRAULIC	7 1/8	2.63	30.91	1,325.07		42	COUGAR
27	HWDP	5	2.88	811.49	1,294.16	42,197.5	42	RIG
1	SUB - XO	7 7/8	2.75	3.20	482.67		0	RIG
12	DRILL COLLAR - SPIRALED	8.06	2.88	364.57	479.47		0	RIG
1	SUB - XO	8	3.25	4.44	114.90		0	DRILLING TOOLS INTERNATIONAL
1	SUB - FILTER	8 1/4	3.25	3.45	110.46		0	GE/BAKER HUGHES
1	DRILL COLLAR - NON MAG	8	3.25	28.23	107.01		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	8	3.25	34.70	78.78		0	GE/BAKER HUGHES
1	STABILIZER	8 9/32	2.56	6.10	44.08		0	DRILLING TOOLS INTERNATIONAL
1	MOTOR - STABILIZER SLEEVE	9 1/2	3.25	36.63	37.98		0	PHOENIX

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
PHX900025	1.5	NOT SEALED	7:8	7		6.77

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	57.13	
DIRECTIONAL	60.53	

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	11:00	6,455.0	510.00	102.0	40	50	109.6	990	4,450.0	102.0	132	132	132	132	12.0	12.0	
11:00	12:30	6,965.0	0.00		0	50	109.6	990	4,450.0	0.0	132	132	132	132	12.0	12.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in^2)	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)
10.70	10.78	631.4	5.4	335.9	1,093.3	27.7	405.7	110.58	583.61	260.32

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/1/2023 23:00	PIONEER DRILLING FLUIDS	WATER BASE	6,965.0	10.75	34	0.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
8.0	10.000	4	5	8.4	0.0	0.0	0.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
18.0	2.6	0.2	3.5	0.000	0.2

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
13,600	280.000	0	4.9/95.1	0.0	0.0	9.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
4.000	8.000	10.000

Comment

Recommeded Fluid Treatment: No treatment needed at this time.

Drilling Fluid Activity Last 24 Hrs: Circ hole clean; pumped caliper around calc 9% washout. Spotted 200 bbls pad mud on bottom prior to POOH. Monitor well on trip tank during tripping ops.

Rig Activity Last 24 Hours: Slide/drill f/ 6,182' t/ 6,965'. ICP reached. Circ hole clean; spotted pad mud; flow checked well was static. POOH t/ 5,500'. Back reamed f/ 5,500' t/ 5,200'. POOH on elevators. Drilling parameters: ROP- 200', WOB-40K, Rotary- 60 RPM, Bit- 191 RPM, Tq- 14 KLB-Ft, Diff- 985 PSI. P/U 230k, S/O 200k, ROT 225K. Lithology @ 6,965' 95% LS, 5%SH. Currently POOH at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	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	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6

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		2123			8,230	6427
DIESEL	FUEL	GAL		2639			7,281	12477
DIESEL	FUEL	GAL	0	0		Winter Tank	19,990	0
WATER	FRESH	BBL	275	275		Initial Reading: 77,381 Final Reading: 77,656	0	12392

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
BARITE - BULK	WEIGHTING MATERIAL	TON		4.22	29.02	11
CAUSTIC SODA	ALKALINITY CONTROL	SACK		3	46.0	9
PAC LV	FILTRATE CONTROL	SACK		57	91.0	57
SODA ASH	ALKALINITY CONTROL	SACK		46	58.0	192
WO DEFOAMER A	DEFOAMER	GAL		11	16.0	64
SOLTEX	FILTRATE CONTROL	LB		36	94.0	148
NUT PLUG MEDIUM - WALNUT MEDIUM	LOST CIRCULATION	LB SACK		4	46.0	4
DEFOAMER - SILICONE	DEFOAMER	GAL CAN		2	30.0	34

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

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

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
6,472.00	3.43	241.04	6,370.94	110.59	-342.32	-907.50	1.61
6,563.00	2.50	230.54	6,461.82	112.14	-344.90	-911.41	1.18
6,653.00	2.51	227.71	6,551.74	113.91	-347.47	-914.38	0.14
6,744.00	2.30	232.33	6,642.66	115.58	-349.93	-917.30	0.31
6,834.00	2.20	231.87	6,732.59	117.00	-352.10	-920.09	0.11

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	-5,443.0		8,436.0	8,493.0	
ALT_ICP2	-5,493.0		8,486.0		
267_5_SPBY_M_A1	-5,755.0		8,748.0	8,807.0	
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	
ILP	-5,920.0		8,913.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM

RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	880.00
Days Since RI:	880.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/03/2023
Report #:	8
DFS:	6
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$205,197.62

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
378.00	3.50	100.00	7,343.0	19,619.0	$205,197.62	$1,583,931.50

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
108.0		0.00	7,241.5	8,963.1	$	$31,475.18	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	500.0	1,500.0	Goal Not Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PROPOSED PRODUCTION, 19,621.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
0.00	30.00	5.00	0.00	30.00	0.00

Operations Summary

TIH and Land 9 5/8" Intermediate Casing, Circulate 1.5x Capacity, R/U and Cement Intermediate, Install and Test Packoff, P/U 8 3/4" Vertical Assembly, TIH, Test Casing To 2500 psi, Drill Out Shoe Track and 10' Formation, FIT To 9.5#, Drill 8 3/4" Vertical Section T/7,343'. (INC - .50°, AZI - 161.46°, Above - 2.2', Right - 26.9')

Operations Next Report Period

Drll Production Vertical F/7,343' T/8,398', Circulate Wellbore Clean, Round Trip For Autotrack Assembly, Drill Production Curve.

Operations At Report Time

Drilling Production Vertical @ 7,343'

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 0%, Prod Lat- 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	5.5	11:30	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	RIH with 9 5/8" int casing F/1,500' T/6,921'. Monitoring displacements on trip tanks.	6,965.0	6,965.0		
11:30	0.25	11:45	INT, CASE & CMT	CSG_W/O ROTATION	NORMAL	P/U landing joint and slack off F/6,921' T/6,650' landing out in wellhead. Land out with 180K down	6,965.0	6,965.0		
11:45	0.25	12:00	INT, CASE & CMT	RD_CSG	NORMAL	R/D 9 5/8" Intermediate casing equipment	6,965.0	6,965.0		
12:00	0.25	12:15	INT, CASE & CMT	RU_CMT	NORMAL	R/U 9 5/8" cement head assembly	6,965.0	6,965.0		
12:15	1.5	13:45	INT, CASE & CMT	CIRC	NORMAL	Circulate 1.5x casing capacity prior to cementing at 6 bpm with FULL returns. ***Safety meeting on cementing while circulating***	6,965.0	6,965.0		
13:45	0.25	14:00	INT, CASE & CMT	RU_CMT	NORMAL	Rig Up Halliburton steel lines	6,965.0	6,965.0		
14:00	4	18:00	INT, CASE & CMT	CMT	NORMAL	Cement intermediate single stage as follows: Pressure test lines to 4500 psi, pump 50 bbls of 11 ppg spacer, 656 bbls of 11 ppg lead, 50 bbls of 14.8 ppg 1st tail, 15 bbls of 15.2 ppg 2nd tail, drop plug and displace with 520 bbls of FW. Plug bumped on time,Pressured up @ 3 BPM F/1,440 psi T/1,890 psi, held for 5 minutes, Bled back 4 bbls, floats holding. 290 bbls of cement returned to surface. Flowcheck - well was static	6,965.0	6,965.0		
18:00	0.25	18:15	INT, CASE & CMT	FLOW_CHK	NORMAL	Flow Check **Well is Static**	6,965.0	6,965.0		

18:15	0.25	18:30	INT, CASE & CMT	WH	NORMAL	Flush through BOPE	6,965.0	6,965.0		
18:30	0.5	19:00	INT, CASE & CMT	WH	NORMAL	Set Pack off in well head & Test to 5K **Good Test**	6,965.0	6,965.0		
19:00	0.25	19:15	INT, CASE & CMT	WRBSH	NORMAL	P/U wearbushing retrieval tool and set wearbushing in wellhead	6,965.0	6,965.0		
19:15	0.25	19:30	PROD, PRE DRL	SFTY	NORMAL	Hold PJSM with personnel on picking up directional components	6,965.0	6,965.0		
19:30	0.5	20:00	PROD, PRE DRL	PU_ DIR	NORMAL	P/U directional components as per Baker Directional	6,965.0	6,965.0		
20:00	0.5	20:30	PROD, PRE DRL	RIG_SVC	NORMAL	Service and inspect drill floor equipment.	6,965.0	6,965.0		
20:30	0.5	21:00	PROD, PRE DRL	HDL_BHA	NORMAL	TIH 117' T/1020' with stands of 5" HWDP from the derrick. Monitoring displacements on trip tanks.	6,965.0	6,965.0		
21:00	2.5	23:30	PROD, PRE DRL	TIH_ELEV	NORMAL	TIH F/1,020' T/6,858'. Monitoring displacements on trip tanks.	6,965.0	6,965.0		
23:30	0.5	00:00	PROD, PRE DRL	HDL_ROTHD	NORMAL	Remove trip nipple and install rotating head assembly.	6,965.0	6,965.0		
00:00	1.25	01:15	PROD, PRE DRL	CSG_TEST	NORMAL	FIll DP, space out drill string, flush surface lines and test casing T/2,500 psi F/30 minutes.	6,965.0	6,965.0		
01:15	0.5	01:45	PROD, PRE DRL	DRL_OUT	NORMAL	Drill out shoe track and rathole F/6,858' T/6,965.	6,965.0	6,965.0		
01:45	0.25	02:00	PROD, PRE DRL	DRL	NORMAL	Drill 10' new formation	6,965.0	6,975.0		
02:00	0.25	02:15	PROD, PRE DRL	CIRC	NORMAL	Circulate prior to performing FIT	6,975.0	6,975.0		
02:15	0.25	02:30	PROD, PRE DRL	FLOW_CHK	NORMAL	Flow check well. Well static	6,975.0	6,975.0		
02:30	0.25	02:45	PROD, PRE DRL	FIT	NORMAL	Space out drill string and perform FIT T/9.5# EMW.	6,975.0	6,975.0		
02:45	3.25	06:00	PROD, DRL	DRL	NORMAL	Drill Production Vertical F/6,975' T/7,343' (368' @ 113.2' fph). Pumping @ 600 GPM w/3,030 psi, Rotating @ 60 RPM w/7-12K torque, 30K WOB and 850 psi Diff.	6,975.0	7,343.0		

Drill Strings

BHA #3 , INTERMEDIATE 2 - VERTICAL/CURVE

Bit Run	Drill Bit		Bit Type	Make
3	8 3/4, DD506TX, 5332261		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	3.50	378.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
3.50	378.00	108.0	6,965.0	7,343.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
140	DRILL PIPE	5	4.28	6,322.20	7,343.00	123,282.9	169	RIG
2	HWDP	5	3.25	60.96	1,020.80	3,169.9	45	RIG
1	DRILLING JARS - HYDRAULIC	7 1/8	2.63	30.91	959.84		42	WEATHERFORD
27	HWDP	5	3.25	811.49	928.93	42,197.5	42	RIG
26	SUB - FILTER	6 7/16	2.75	4.17	117.44		0	DRILLING TOOLS INTERNATIONAL
1	DRILL COLLAR - NON MAG	6 17/32	3.25	28.35	113.27		0	DRILLING TOOLS INTERNATIONAL
1	MWD TOOL - NON-RETRIEVABLE	6 3/4	2.81	41.11	84.92		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.25	42.76	43.81		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15022849	1.5	NOT SEALED	7:8	6.4		6.55

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	53.95	
DIRECTIONAL	57.35	

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 (°)
01:45	02:00	6,965.0	10.00	40.0	25	30	265.0	500	2,150.0	40.0	195	210	185	195	8.0	8.0	
02:45	06:00	6,975.0	368.00	113.2	30	60	800.0	600	3,030.0	113.0	195	210	185	195	12.0	8.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
10.80	11.04	207.3	3.4	246.1	592.3	16.8	632.5	122.74	16.75	356.74

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/2/2023 18:00	PIONEER DRILLING FLUIDS	WATER BASE	6,965.0	10.80	34	0.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
8.0	10.000	4	5	8.4	0.0	0.0	0.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
18.0	2.7	0.2	3.5	0.000	0.2

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH

136,000	280.000	0	4.9/95.1	0.0	0.0	9.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
4.000	7.000	9.000

Comment

Recommeded Fluid Treatment: Fill pits w/ 8.4ppg OBM when ready.

Drilling Fluid Activity Last 24 Hrs: CMT INT job had good returns throughout no losses 290 bbls CMT seen at surface. Transferred WBM t/ Fracs. Cleaned pits. Dressed shakers w/ 170 mesh screens. Rec 7,296 gal mud diesel.

Rig Activity Last 24 Hours: Washed landing jt t/ 6,950'. Circ csg cap. CMT. Flow checked well was static. Set/tested pack off. P/U BHA. Drilling parameters: ROP- 200', WOB-40K, Rotary- 60 RPM, Bit- 191 RPM, Tq- 14 KLB-Ft, Diff- 985 PSI. P/U 230k, S/O 200k, ROT 225K. Lithology @ 6,965' 95% LS, 5%SH. Currently TIH at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

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

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Cement

Cement Fluids

Fluid Type	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Class	Yield (ft³/sack)	Density (lb/gal)
SPACER	0.0	0.0			11.00
LEAD CMT	27.0	5,903.0	CLASS C	2.50	11.00
TAIL CMT	5,903.0	6,816.0	CLASS C	1.33	14.80
TAIL CMT	6,816.0	6,955.0	CLASS C	1.26	15.20
DSPLMT	6,858.0	6,858.0			8.40

Cement Stages

Description	Final Top Depth	Btm (ftKB)	Top Pl...	Btm Pl...
INTERMEDIATE CEMENT	27.0	6,955.0	Yes	

Q Pump Init	Q Pump Final	Q Pump Avg	P Pump Final	P Plug Bump	Float	Recip?	Rotated?
6	3	6	1,395.0	1,400.0	No	No	No

INTERMEDIATE CASING CEMENT casing 1/2/2023 14:00

Cmtg End Date	Wellbore	Technical Result	Comment
1/2/2023 18:00	ORIGINAL	SUCCESS	Cement intermediate single stage as follows: Pressure test lines to 4500 psi, pump 50 bbls of 11 ppg spacer, 656 bbls of 11 ppg lead, 50 bbls of 14.8 ppg 1st tail, 15 bbls of 15.2 ppg 2nd tail, drop plug and displace with 520 bbls of FW. Plug bumped on time,Pressured up @ 3 BPM F/1,440 psi T/1,890 psi, held for 5 minutes, Bled back 4 bbls, floats holding. 290 bbls of cement returned to surface. Flowcheck - well was static

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	7295	1734			12,842	14211
DIESEL	MUD	GAL	7296	0			15,526	6427
DIESEL	FUEL	GAL	0	0		Winter Tank	19,990	0
WATER	FRESH	BBL	0	0		Initial Reading: 77,656 Final Reading: 77,656	0	12392

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	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
2	7,071.0	1/3/2023 03:45	300.0	30	106	95

2	7,071.0	1/3/2023 03:45	350.0	40	141	95
2	7,071.0	1/3/2023 03:45	220.0	20	70	95
3	7,071.0	1/3/2023 03:45	350.0	40	141	95
3	7,071.0	1/3/2023 03:45	210.0	20	70	95
3	7,071.0	1/3/2023 03:45	290.0	30	106	95

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
7,009.00	1.31	235.92	6,907.51	119.11	-355.29	-924.13	0.41
7,100.00	0.50	235.92	6,998.50	119.60	-356.10	-925.32	0.89

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	-5,443.0		8,436.0	8,493.0	
ALT_ICP2	-5,493.0		8,486.0		
267_5_SPBY_M_A1	-5,755.0		8,748.0	8,807.0	
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	
ILP	-5,920.0		8,913.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	881.00
Days Since RI:	881.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/04/2023
Report #:	9
DFS:	7
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$79,292.52

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
1,221.00	8.00	100.00	8,564.0	19,619.0	$79,292.52	$1,662,048.02

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
152.6	1.00	0.00	8,460.2	8,963.1	$13,419.38	$44,894.56	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	1,500.0	2,000.0	Goal Not Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PROPOSED PRODUCTION, 19,621.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
0.00	474.00	925.00	0.00	474.00	1,829.00

Operations Summary

Drll Production Vertical F/7,343' T/8,375', Circulate Wellbore Clean, Round Trip For Autotrack Assembly, TIH, Drill Production Curve F/8,375' T/8,564' (INC - .11.28°, AZI - 176.26°, Above - 12', Right - 18.3', MY - 9.2°, BRN - 9.4°)

Operations Next Report Period

Drill & Land Production Curve, Drill Lateral T/10,564'

Operations At Report Time

Drilling Production Curve @ 8,564

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 66.76%, Prod Lat- 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	4.25	10:15	PROD, DRL	DRL	NORMAL	Drill Production Vertical F/ 7,343' T/8,375' (1,032' @ 243' fph). Pumping @ 600 GPM w/3,530 psi, Rotating @ 60 RPM w/13-15K torque, 30K WOB and 1100 psi Diff.	7,343.0	8,375.0		
10:15	1	11:15	PROD, DRL CURVE	CIRC	NORMAL	Circulate hole clean	8,375.0	8,375.0		
11:15	0.25	11:30	PROD, DRL CURVE	FLOW_CHK	NORMAL	Flow Check (Well Static)	8,375.0	8,375.0		
11:30	3.75	15:15	PROD, DRL CURVE	TOOH_ELEV	NORMAL	TOOH F/ 8,375' T/ BHA, monitoring well on trip tank, hole taking proper fill	8,375.0	8,375.0		
15:15	0.25	15:30	PROD, DRL CURVE	SFTY	NORMAL	PJSM on laying down BHA	8,375.0	8,375.0		
15:30	0.75	16:15	PROD, DRL CURVE	LD_DIR	NORMAL	L/D 8 3/4" Directional Components	8,375.0	8,375.0		
16:15	0.5	16:45	PROD, DRL CURVE	RIG_SVC	NORMAL	Rig Service	8,375.0	8,375.0		
16:45	0.5	17:15	PROD, DRL CURVE	SFTY	NORMAL	PJSM on picking up directional tools/ Clean rig floor	8,375.0	8,375.0		
17:15	0.75	18:00	PROD, DRL CURVE	PU_ DIR	NORMAL	P/U 8 1/2" Bit, RSS assembly	8,375.0	8,375.0		
18:00	0.25	18:15	PROD, DRL CURVE	TIH_ELEV	NORMAL	TIH F/BHA T/1,018'. Monitoring well on trip tanks. Hole giving proper displacements.	8,375.0	8,375.0		
18:15	0.5	18:45	PROD, DRL CURVE	CIRC	NORMAL	Fill DP and test test directional tools.	8,375.0	8,375.0		

18:45	2	20:45	PROD, DRL CURVE	TIH_ELEV	NORMAL	TIH F/1,018' T/5,535'. Monitoring well on trip tanks. Hole giving proper displacements.	8,375.0	8,375.0		
20:45	0.5	21:15	PROD, DRL CURVE	HDL_ROTHD	NORMAL	Remove trip nipple and install rotating head assembly.	8,375.0	8,375.0		
21:15	0.75	22:00	PROD, DRL CURVE	TIH_ELEV	NORMAL	TIH F/5,535' T/6,950'. Monitoring well on trip tanks. Hole giving proper displacements.	8,375.0	8,375.0		
22:00	0.25	22:15	PROD, DRL CURVE	SFTY	NORMAL	Hold PJSM with personnel on Slip/Cut Operations.	8,375.0	8,375.0		
22:15	1.5	23:45	PROD, DRL CURVE	SLIP_CUT	NORMAL	Slip/Cut 72' of drilling line	8,375.0	8,375.0		
23:45	0.5	00:15	PROD, DRL CURVE	RIG_SVC	NORMAL	Service and inspect drill floor equipment.	8,375.0	8,375.0		
00:15	0.5	00:45	PROD, DRL CURVE	RIG_RPR	NORMAL	Change out saver sub on topdrive	8,375.0	8,375.0		
00:45	0.5	01:15	PROD, DRL CURVE	TIH_ELEV	NORMAL	TIH F/6,950' T/7,833'. Monitoring well on trip tanks. Hole giving proper displacements.	8,375.0	8,375.0		
01:15	1	02:15	PROD, DRL CURVE	PU_DP	NORMAL	P/U drill pipe singles and TIH F/7,833' T/8,375'. Monitoring well on trip tanks. Hole giving proper displacements.	8,375.0	8,375.0		
02:15	3.75	06:00	PROD, DRL CURVE	DRL	NORMAL	Drill Production Curve F/8,375' T/8,564' (189' @ 50.4' fph). Pumping @ 550 GPM w/2,500 psi, Rotating @ 75 RPM w/7-9K torque, 10K WOB and 400 psi Diff.	8,375.0	8,564.0		

Drill Strings

BHA #3 , PRODUCTION - VERTICAL

Bit Run	Drill Bit		Bit Type	Make
3	8 3/4, DD506TX, 5332261		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	1-1-CT-S-X-0-NO-BHA	7.75	1,410.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
7.75	1,410.00	181.9	6,965.0	8,375.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
163	DRILL PIPE	5	4.28	7,354.20	8,375.00	143,406.9	189	RIG
2	HWDP	5	3.25	60.96	1,020.80	3,169.9	45	RIG
1	DRILLING JARS - HYDRAULIC	7 1/8	2.63	30.91	959.84		42	WEATHERFORD
27	HWDP	5	3.25	811.49	928.93	42,197.5	42	RIG
26	SUB - FILTER	6 7/16	2.75	4.17	117.44		0	DRILLING TOOLS INTERNATIONAL
1	DRILL COLLAR - NON MAG	6 17/32	3.25	28.35	113.27		0	DRILLING TOOLS INTERNATIONAL
1	MWD TOOL - NON-RETRIEVABLE	6 3/4	2.81	41.11	84.92		0	GE/BAKER HUGHES
1	MOTOR - STABILIZER SLEEVE	7	3.25	42.76	43.81		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15022849	1.5	NOT SEALED	7:8	6.4		6.55

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	53.95	
DIRECTIONAL	57.35	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	10:15	7,343.0	1,032.00	242.8	45	60	1,100.0	600	3,550.0	300.0	195	210	185	195	14.0	8.0	
10:15	11:15	8,375.0	0.00		0	60	0.0	600	3,550.0	0.0	195	210	185	195	0.0	8.0	

BHA #4 , PRODUCTION - CURVE/LATERAL

Bit Run	Drill Bit		Bit Type	Make
4	8 1/2, DD506TSX, 5337347		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	3.75	189.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
3.75	189.00	50.4	8,375.0	8,564.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
185	DRILL PIPE	5	4.50	8,354.80	8,564.00	162,918.6	165	RIG
1	SUB - FILTER	6 11/16	3.19	4.17	209.20		2	GE/BAKER HUGHES
3	DRILL PIPE	5	4.50	90.00	205.03	1,755.0	2	RIG
1	MOTOR - STABILIZER SLEEVE	6.65	2.25	43.24	115.03		0	GE/BAKER HUGHES
1	SUB - SHOCK	6.96	3.00	22.66	71.79		0	RIG
1	STABILIZER	7.04	2.75	10.42	49.13		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.69	38.71		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.62	26.02		0	GE/BAKER HUGHES

1	RSS TOOL	6.99	2.75	9.35	10.40		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15072694	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
02:15	06:00	8,375.0	189.00	50.4	10	75	300.0	550	2,500.0	50.4	200	215	185	200	8.0	8.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.55	8.75	126.4	2.2	225.6	394.0	15.4	594.2	166.93	78.63	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/3/2023 21:00	PIONEER DRILLING FLUIDS	OIL BASE	8,375.0	8.55	64	0.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
15.0	10.000	5	6	0.0	7.5	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.5	3.0	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
29,000	4,000.000	0	70.7/29.3	426.0	2.1	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
8.000	14.000	16.000

Comment

Recommeded Fluid Treatment: MW 8.4 ppg. Diesel at 7.13 BPH. Treatment: 1 ppb Tone to raise rheologies, 1 ppb Lime to increase Alkalinity, 2 ppb Mul to increase es, 1 ppb LEM to maintain 6/3 rpm, 0.5 ppb Gilsonite & Soltex to lower HTHP & shale stability.

Drilling Fluid Activity Last 24 Hrs: Filled pits w/ 8.3ppg OBM. Dressed shakers w/ 170 mesh screens. Displaced hole w/ 8.3ppg OBM. Increased MW t/ 8.4 ppg. Pumped slug. Monitor well on trip tank during tripping ops.

Rig Activity Last 24 Hours: TIH, Tested csg for 30 min. Drilled LC & shoe track + 10' t/ 6,975' displaced t/ obm. Flow checked well was static. FIT t/ 9.5 emw. Slide/drilled f/ 6,975' 8,375'. Circ hole clean flow check well was static; pulled 5 stds wet no issues; pumped slug POOH for RSS. C/O BHA TIH, Slip/cut at shoe. Drilling parameters: ROP-350', WOB-40K, Rotary- 60 RPM, Bit- 180 RPM, Tq- 15 KLB-Ft, Diff- 900 PSI. P/U 235k, S/O 200k, ROT 215K. Lithology @ 8,375' 90% SH, 10% LS. Ftg Drilled Last 24hrs: 1,410'. Currently slip/cut drill line at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/3/2023 10:15	KICK OFF	8,375.0	8,273.4

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL		928			14,598	7355
DIESEL	FUEL	GAL	0	0		Winter Tank	19,990	0
WATER	FRESH	BBL	0	0		Initial Reading: 77,656 Final Reading: 77,656	0	12392
DIESEL	FUEL	GAL		1308			11,534	15519

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
BARITE - BULK	WEIGHTING MATERIAL	TON		5	24.02	16
CALCIUM CHLORIDE	CALCIUM CHLORIDE	LB		36	300.0	36
DD LEM	LOW END MODIFIER	GAL		125	1,250.0	125

DD TONE	ORGANOPHILLIC CLAY	SACK		10	330.0	10
DDF MUL	ALL IN ONE EMULSIFIER	GAL		425	675.0	425
SOLTEX	FILTRATE CONTROL	LB		23	71.0	171
XMP GILSONITE	FILTRATE CONTROL	LB		23	107.0	23
DEFOAMER - SILICONE	DEFOAMER	GAL CAN		2	28.0	36

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
2	8,339.0	1/4/2023 02:15	135.0	20	70	95
2	8,339.0	1/4/2023 02:15	300.0	40	141	95
2	8,339.0	1/4/2023 02:15	205.0	30	106	95

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
7,371.00	1.29	60.91	7,269.44	118.87	-354.27	-921.09	0.64
7,461.00	1.21	64.39	7,359.42	118.41	-353.37	-919.35	0.12
7,552.00	0.77	69.44	7,450.40	118.15	-352.74	-917.91	0.49
7,642.00	0.74	65.38	7,540.39	117.98	-352.28	-916.82	0.07
7,732.00	0.21	78.35	7,630.39	117.88	-352.01	-916.13	0.60
7,823.00	0.26	337.11	7,721.39	117.68	-351.79	-916.04	0.40
7,913.00	0.41	273.31	7,811.39	117.39	-351.58	-916.44	0.42
8,003.00	0.71	287.59	7,901.38	117.00	-351.39	-917.30	0.37
8,093.00	0.50	278.54	7,991.38	116.55	-351.16	-918.22	0.26
8,184.00	0.47	87.30	8,082.38	116.47	-351.09	-918.24	1.06
8,274.00	0.90	70.90	8,172.37	116.49	-350.84	-917.20	0.52
8,313.00	0.84	55.41	8,211.37	116.36	-350.58	-916.68	0.62
8,404.00	2.94	171.04	8,302.33	118.45	-352.50	-915.76	3.72
8,494.00	11.28	176.26	8,391.56	129.43	-363.59	-914.83	9.28

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)
ALT_ICP2	-5,493.0		8,486.0		
267_5_SPBY_M_A1	-5,755.0		8,748.0	8,807.0	
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	
ILP	-5,920.0		8,913.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
RICHARDSON, KEN, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-571-2557	432-557-8128	KEN.RICHARDSON@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM

Personnel Log

Company	Count

PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

Generated by WellDrive®

ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	882.00
Days Since RI:	882.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/05/2023
Report #:	10
DFS:	8
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$187,210.99

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
2,494.00	20.75	100.00	11,058.0	19,619.0	$187,210.99	$1,849,259.00

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
120.2	0.75	0.00	8,914.7	8,963.1	$25,006.67	$69,901.22	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	2,000.0	3,000.0	Goal Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PROPOSED PRODUCTION, 19,621.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
416.00	0.00	634.00	989.00	0.00	932.00

Operations Summary

Drill Production Curve F/8,564' T/9,475, Drill Lateral F/ 9,475' T/11,058' (INC - .89.92°, AZI - 164.32°, Above - 13.2', Right - 2.3', AVG DLS -2.30)

Operations Next Report Period

Driil Prouction Lateral T/ 14,058'

Operations At Report Time

Drill Production Lateral @ 11,058

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 15.60%

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	13	19:00	PROD, DRL CURVE	DRL	NORMAL	Drill Production Curve F/8,564' T/9,475' (911' @ 70.1' fph). Pumping @ 550 GPM w/2,500 psi, Rotating @ 75 RPM w/7-9K torque, 10K WOB and 400 psi Diff.	8,564.0	9,475.0		
19:00	9.25	04:15	PROD, DRL LAT	DRL	NORMAL	Drill Production Lateral F/9475' T/10870' (1,395' @ 151' fph). Pumping @ 650 GPM w/3,500 psi, Rotating @ 50RPM w/14-15K torque, 40-45K WOB and 575psi Diff. Note: Control drilled due to lateral vibrations. Attempted different parameters to mitigate lateral vibrations with no success.	9,475.0	10,870.0		
04:15	0.5	04:45	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	10,870.0	10,870.0		
04:45	1.25	06:00	PROD, DRL LAT	DRL	NORMAL	Drill Production Lateral F/10,870' T/11058' (188' @ 151' fph). Pumping @ 650 GPM w/3,500 psi, Rotating @ 50RPM w/14-15K torque, 40-45K WOB and 575psi Diff. Note: Control drilled due to lateral vibrations. Attempted different parameters to mitigate lateral vibrations with no success.	10,870.0	11,058.0		

Interval Problems

DIRECTIONAL, ftKB, 1/4/2023 19:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
3		Yes	DIRECTIONAL CONTROL	EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Control drilling due to lateral vibrations. Attempted different parameters to mitigate lateral vibrations with no success.

Drill Strings

BHA #4 , PRODUCTION - CURVE/LATERAL

Bit Run	Drill Bit	Bit Type	Make

4	8 1/2, DD506TSX, 5337347		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	24.50	2,683.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
24.50	2,683.00	109.5	8,375.0	11,058.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
240	DRILL PIPE	5	4.50	10,848.80	11,058.00	211,551.6	213	RIG
1	SUB - FILTER	6 11/16	3.19	4.17	209.20		2	GE/BAKER HUGHES
3	DRILL PIPE	5	4.50	90.00	205.03	1,755.0	2	RIG
1	MOTOR - STABILIZER SLEEVE	6.65	2.25	43.24	115.03		0	GE/BAKER HUGHES
1	SUB - SHOCK	6.96	3.00	22.66	71.79		0	RIG
1	STABILIZER	7.04	2.75	10.42	49.13		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.69	38.71		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.62	26.02		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.35	10.40		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15072694	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	06:15	8,564.0	46.00	184.0	9	75	321.7	548	2,463.0	100.0	180	180	180	180	9.0	9.0	
06:30	07:30	8,610.0	91.00	91.0	17	75	415.9	549	2,488.0	93.0	181	181	181	181	9.0	9.0	
07:30	09:00	8,701.0	92.00	61.3	15	75	289.9	548	2,362.0	67.0	184	184	184	184	8.0	8.0	
09:15	10:45	8,793.0	88.00	58.7	15	75	268.1	549	2,340.0	60.0	183	183	183	183	8.0	8.0	
10:45	12:30	8,881.0	92.00	52.6	16	75	198.3	548	2,270.0	50.0	182	182	182	182	8.0	8.0	
12:30	13:15	8,973.0	32.00	42.7	15	75	150.9	547	2,222.0	49.0	183	183	183	183	8.0	8.0	
13:15	14:30	9,005.0	57.00	45.6	17	75	179.6	548	2,251.0	50.0	182	182	182	182	8.0	8.0	
14:30	15:45	9,062.0	90.00	72.0	21	75	283.6	548	2,355.0	86.0	178	178	178	178	10.0	10.0	
15:45	16:15	9,152.0	91.00	182.0	29	75	456.4	548	2,504.0	139.0	171	171	171	171	11.0	11.0	
16:30	16:45	9,243.0	0.00		0	30	0.0	548	1,965.0	0.0	204	204	204	204	4.0	4.0	
16:45	17:30	9,243.0	92.00	122.7	31	75	403.2	548	2,450.0	122.0	170	170	170	170	11.0	11.0	
17:45	18:00	9,335.0	10.00	40.0	27	75	167.5	548	2,199.0	70.0	187	187	187	187	9.0	9.0	
18:00	18:30	9,345.0	81.00	162.0	33	75	442.1	548	2,473.0	130.0	182	182	182	182	10.0	10.0	
18:45	19:15	9,426.0	92.00	184.0	29	61	382.1	649	3,101.0	128.0	177	177	177	177	11.0	11.0	
19:30	20:00	9,518.0	87.00	174.0	31	40	392.0	653	3,111.0	132.0	175	175	175	175	11.0	11.0	
20:15	20:30	9,605.0	90.00	360.0	43	55	658.0	649	3,377.0	230.0	162	162	162	162	14.0	14.0	
20:45	21:00	9,695.0	91.00	364.0	32	40	560.3	653	3,388.0	190.0	163	163	163	163	13.0	13.0	
21:15	21:30	9,786.0	90.00	360.0	35	40	591.9	653	3,420.0	197.0	160	160	160	160	14.0	14.0	
21:45	22:30	9,876.0	90.00	120.0	38	40	377.6	653	3,227.0	129.0	168	168	168	168	12.0	12.0	
22:30	23:00	9,966.0	91.00	182.0	42	43	542.9	653	3,392.0	199.0	164	164	164	164	14.0	14.0	
23:00	23:30	10,057.0	92.00	184.0	44	50	569.1	653	3,418.0	192.0	161	161	161	161	15.0	15.0	
23:30	00:00	10,149.0	88.00	176.0	45	50	547.0	653	3,396.0	181.0	161	161	161	161	15.0	15.0	
00:00	00:30	10,237.0	91.00	182.0	45	50	555.0	653	3,404.0	182.0	161	161	161	161	15.0	15.0	
00:30	01:15	10,328.0	100.00	133.3	45	50	526.8	653	3,404.0	170.0	161	161	161	161	14.0	14.0	
01:15	01:45	10,428.0	82.00	164.0	45	50	520.6	653	3,398.0	168.0	162	162	162	162	14.0	14.0	
01:45	04:15	10,510.0	360.00	144.0	45	50	520.6	653	3,398.0	144.0	162	162	162	162	14.0	14.0	
04:15	04:45	10,870.0	0.00		0	50	520.6	653	3,398.0	0.0	162	162	162	162	14.0	14.0	
04:45	06:00	10,870.0	188.00	150.4	45	50	520.6	653	3,398.0	150.0	162	162	162	162	14.0	14.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.40	8.68	207.9	3.7	267.8	545.7	18.3	705.4	215.99	193.11	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/4/2023 23:00	PIONEER DRILLING FLUIDS	OIL BASE	10,100.0	8.40	50	117.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
12.0	7.000	5	6	0.0	8.0	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	3.2	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
27,000	4,000.000	0	73.4/26.6	479.0	1.9	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
7.000	11.000	13.000

Comment

Recommeded Fluid Treatment: MW 8.4 ppg. Diesel at 7.13 BPH. Water at 2.68
BPH. Treatment: 1 ppb Tone to maintain
rheologies, 1 ppb Lime to increase Alkalinity, 2
ppb Mul to increase es, 1 ppb LEM to maintain 6/3
rpm, 0.5 ppb Gilsonite & Soltex to maintain HTHP
& shale stability.
Drilling Fluid Activity Last 24 Hrs: Building 225 bbl batches of OBM slurry as needed for volume in MT2. Seepage seen when drilling through sprayberry at 8,700' lowered MW t/ 8.4ppg pumped 20 bbl 15ppd LCM sweep t/ mitigate seepage

Rig Activity Last 24 Hours: TIH, Drilled curve f/ 8,375' KOP t/ 9,475' LP. Drilled lateral f/ 9,476' t/ 10,100'. Drilling parameters: ROP- 200', WOB-45K, Rotary- 100 RPM, Bit-181 RPM, Tq- 11 KLB-Ft, Diff- 600 PSI. P/U 215k, S/O 185k, ROT 205K. Lithology @ 9,970' 100% SH, TR% LS. Ftg Drilled Last 24hrs: 1,725'. Currently drilling lateral at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL	22000	14696			21,902	22051
DIESEL	FUEL	GAL	0	0		Winter Tank	19,990	0
WATER	FRESH	BBL	0	0		Initial Reading: 77,656 Final Reading: 77,656	0	12392
DIESEL	FUEL	GAL		2373			9,161	17892

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
BARITE - BULK	WEIGHTING MATERIAL	TON	18.94	3.94	39.02	20
CALCIUM CHLORIDE	CALCIUM CHLORIDE	LB		65	235.0	101
DD LEM	LOW END MODIFIER	GAL		425	825.0	550
DDF MUL	ALL IN ONE EMULSIFIER	GAL		300	375.0	725
DD TONE	ORGANOPHILLIC CLAY	SACK		91	239.0	101
LIME	ALKALINITY CONTROL	SACK		80	110.0	97
SOLTEX	FILTRATE CONTROL	LB		16	55.0	187
XMP GILSONITE	FILTRATE CONTROL	LB		17	90.0	40
CALCIUM CARBONATE FINE	LOST CIRCULATION	LB		8	63.0	8
CALCIUM CARBONATE MEDIUM	LOST CIRCULATION	LB		8	63.0	8
ALUMINUM STERATE	DEFOAMER	LB	5	5	0.0	5
PRO SWEEP AID	LOST CIRCULATION	LB		30	210.0	30
TRANSPORTATION	MISCELLANEOUS	EA	1	1	0.0	3

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
1	9,333.0	1/5/2023 03:22	200.0	20	70	95
2	9,333.0	1/5/2023 03:22	180.0	20	70	95
1	9,333.0	1/5/2023 03:22	265.0	30	106	95
2	9,333.0	1/5/2023 03:22	260.0	30	106	95
1	9,333.0	1/5/2023 03:23	345.0	40	141	95
2	9,333.0	1/5/2023 03:23	340.0	40	141	95

Deviation Surveys

Date	Description	Job

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
8,585.00	19.60	163.33	8,479.22	153.48	-387.14	-909.86	9.84
8,675.00	28.53	164.98	8,561.32	190.12	-422.43	-899.94	9.95
8,765.00	35.11	163.69	8,637.75	237.53	-468.08	-887.09	7.35
8,856.00	44.27	163.02	8,707.70	295.52	-523.69	-870.42	10.08
8,946.00	52.38	161.65	8,767.49	362.56	-587.67	-850.00	9.08
9,037.00	60.91	162.36	8,817.48	438.32	-659.90	-826.56	9.40
9,127.00	72.18	166.48	8,853.26	520.71	-739.32	-804.55	13.20
9,218.00	78.88	172.41	8,876.00	608.55	-825.86	-788.49	9.69
9,308.00	81.32	168.86	8,891.48	696.89	-913.31	-774.06	4.74
9,398.00	85.63	164.12	8,901.71	786.25	-1,000.21	-753.16	7.09
9,489.00	90.29	160.85	8,904.95	877.00	-1,086.90	-725.80	6.25
9,579.00	87.45	164.90	8,906.73	966.83	-1,172.86	-699.31	5.50
9,670.00	91.18	166.58	8,907.82	1,057.80	-1,261.03	-676.90	4.50
9,760.00	87.98	167.23	8,908.47	1,147.77	-1,348.68	-656.52	3.63
9,850.00	88.56	163.30	8,911.19	1,237.71	-1,435.66	-633.64	4.41
9,941.00	89.06	165.46	8,913.08	1,328.65	-1,523.28	-609.14	2.44
10,031.00	89.52	167.19	8,914.20	1,418.64	-1,610.71	-587.87	1.99
10,122.00	89.61	166.65	8,914.89	1,509.62	-1,699.35	-567.28	0.60
10,212.00	89.55	166.35	8,915.55	1,599.61	-1,786.86	-546.27	0.34
10,302.00	89.76	166.06	8,916.09	1,689.61	-1,874.26	-524.81	0.40
10,393.00	90.35	165.96	8,916.00	1,780.61	-1,962.56	-502.81	0.66
10,483.00	90.66	166.42	8,915.21	1,870.60	-2,049.96	-481.32	0.62
10,574.00	89.58	166.12	8,915.02	1,961.60	-2,138.36	-459.73	1.23
10,664.00	89.61	165.02	8,915.66	2,051.59	-2,225.51	-437.30	1.22
10,754.00	91.06	164.70	8,915.13	2,141.58	-2,312.39	-413.79	1.65
10,844.00	89.92	164.32	8,914.36	2,231.54	-2,399.11	-389.76	1.34

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	8,812.0
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	8,835.4
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	8,861.4
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	8,897.7
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	8,902.5
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM
GALLAGHER, JEFFERY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-282-4788	JEFFERY.GALLAGHER@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	883.00
Days Since RI:	883.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/06/2023
Report #:	11
DFS:	9
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$143,063.07

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
955.00	7.00	100.00	12,013.0	19,619.0	$143,063.07	$1,992,322.07

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
136.4		0.00	8,905.1	8,963.1	$11,738.90	$81,640.12	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	3,000.0	3,000.0	Goal Not Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PROPOSED PRODUCTION, 19,621.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
790.00	0.00	715.00	995.00	0.00	974.00

Operations Summary

Driil Prouction Lateral T/ 11,058' T/ 11863', TOOH due to RSS not maintaining hole direction, possibly due to excessive shock and vibe from 7" tomax tool, Change BHA & TIH, Drill F/11863 T/12,013' (INC - .92.2°, AZI - 171.28°, Above - 4.5', Left - 9.89', AVG DLS -3.1)

Operations Next Report Period

Driil Prouction Lateral T/ 15,013'

Operations At Report Time

Drill Production Lateral @ 12,013'

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 15.60%

Time Log

Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	4.75	10:45	PROD, DRL LAT	DRL	NORMAL	Drill Production Lateral F/11,058' T/11,863' (805' @ 169' fph). Pumping @ 650 GPM w/3,500 psi, Rotating @ 50RPM w/14-15K torque, 40-45K WOB and 575psi Diff. ***Control drill and adjust parameters and try to mitigate shock and vibe, tool started giving 5-7 degree doglegs and didnt seam to be formation push, last survey had came up to 97 degrees, decision was made to TOOH due VSS caused from the 7 degree tomax creating comms issues with the RSS steering head***	11,058.0	11,863.0		
10:45	1.25	12:00	PROD, DRL LAT	CIRC	NORMAL	Circulate hole clean	11,863.0	11,863.0	1.25	4
12:00	0.25	12:15	PROD, DRL LAT	FLOW_CHK	NORMAL	Flow Check Well (static)	11,863.0	11,863.0	0.25	4
12:15	5	17:15	PROD, DRL LAT	TOOH_ELEV	NORMAL	TOOH F/ 11,863' T/ BHA, monitoring well on trip tank, hole taking proper fill	11,863.0	11,863.0	5.00	4
17:15	0.25	17:30	PROD, DRL LAT	SFTY	NORMAL	PJSM on changing out tomax/ bit/ flex	11,863.0	11,863.0	0.25	4
17:30	1	18:30	PROD, DRL LAT	LD_DIR	NORMAL	L/D RSS assembly	11,863.0	11,863.0	1.00	4
18:30	0.5	19:00	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	11,863.0	11,863.0	0.50	4
19:00	0.5	19:30	PROD, DRL LAT	SFTY	NORMAL	PJSM on picking up BHA/ Clean Rig Floor	11,863.0	11,863.0	0.50	4
19:30	1.5	21:00	PROD, DRL LAT	PU_ DIR	NORMAL	P/U RSS assembly	11,863.0	11,863.0	1.50	4
21:00	2.75	23:45	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/ BHA T/ 4200', monitoring well on trip tank, hole displacing properly	11,863.0	11,863.0	2.75	4
23:45	0.5	00:15	PROD, DRL LAT	HDL_ROTHD	NORMAL	Pull Trip nipple and install rotating head	11,863.0	11,863.0	0.50	4
00:15	3.5	03:45	PROD, DRL LAT	TIH_ELEV	NORMAL	TIH F/ 4200'T/ 11863', monitoring well on trip	11,863.0	11,863.0	3.50	4

						tank, hole displacing properly				
03:45	2.25	06:00	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 11,863' T/ 12,013' (150' @ 66 FPH), 650 GPMs, 100 RPM, 40K WOB, 3500 SPP, 14-15K torque ****Downlink to gravity steer mode once on bottom to correct 97 degree inc****	11,863.0	12,013.0		

Interval Problems

DIRECTIONAL, 11,863.0ftKB, 1/4/2023 19:00

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
3	15.75	Yes	DIRECTIONAL CONTROL	EQUIPMENT		BAKER HUGHES OILFIELD OPERATIONS INC	Control drilling due to lateral vibrations. Attempted different parameters to mitigate lateral vibrations with no success.

DIRECTIONAL, 11,863.0ftKB, 1/5/2023 10:45

Ref #	Dur (hr)	Exclude From Problem Time Calcs?	SubType	Problem Description	Est Cost OR (Cost)	Accountable Party	Comment
4	17.00	No	ROTARY STEERABLE	TROUBLESHOOTING - DOWNHOLE EQUIPMENT		TOMAX DRILLING TECHNOLOGY LLC	TOOH due to RSS not maintaining hole direction, possibly due to excessive shock and vibe from 7" tomax tool, Change BHA & TIH

Drill Strings

BHA #4 , PRODUCTION - CURVE/LATERAL

Bit Run	Drill Bit		Bit Type	Make
4	8 1/2, DD506TSX, 5337347		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	1-1-WT-S-X-0-NO-DTF	31.25	3,488.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
31.25	3,488.00	111.6	8,375.0	11,863.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
259	DRILL PIPE	5	4.50	11,653.80	11,863.00	227,249.1	229	RIG
1	SUB - FILTER	6 11/16	3.19	4.17	209.20		2	GE/BAKER HUGHES
3	DRILL PIPE	5	4.50	90.00	205.03	1,755.0	2	RIG
1	MOTOR - STABILIZER SLEEVE	6.65	2.25	43.24	115.03		0	GE/BAKER HUGHES
1	SUB - SHOCK	6.96	3.00	22.66	71.79		0	RIG
1	STABILIZER	7.04	2.75	10.42	49.13		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.69	38.71		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.62	26.02		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.35	10.40		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15072694	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	10:45	11,058.0	805.00	169.5	45	50	520.6	653	3,398.0	160.0	162	162	162	162	14.0	14.0	

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, DD506TSX, 5372111		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	2.25	150.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
2.25	150.00	66.7	11,863.0	12,013.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
262	DRILL PIPE	5	3.83	11,805.41	12,013.00	230,205.5	230	RIG
1	SUB - FILTER	6 3/4	2.75	4.17	207.59		0	GE/BAKER HUGHES
3	DRILL PIPE	5	3.83	90.00	203.42		0	RIG
1	MOTOR - STABILIZER SLEEVE	4.778	3.25	43.00	113.42		0	GE/BAKER HUGHES
1	SUB - SHOCK	6 3/4	2.75	17.24	70.42		0	TOMAX
1	DRILL COLLAR - PONY	6.96	3.00	9.98	53.18		0	GE/BAKER HUGHES
1	STABILIZER	7.04	2.75	4.84	43.20		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.38	38.36		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.63	25.98		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.34	10.35		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15013762	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

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 (°)
03:45	06:00	11,863.0	150.00	66.7	20	50	285.0	625	3,141.0	50.0	200	225	170	200	11.0	6.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.40	8.71	182.2	3.2	256.3	499.9	17.5	675.2	170.15	237.92	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/5/2023 22:00	PIONEER DRILLING FLUIDS	OIL BASE	11,863.0	8.40	56	

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
12.0	9.000	5	6	0.0	8.4	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	3.2	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
24,000	4,000.000	0	74.5/25.5	511.0	2.2	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
8.000	14.000	16.000

Comment

Recommeded Fluid Treatment: MW 8.4 ppg. Diesel at 7.13 BPH. Water at 2.68 BPH. Treatment: 1 ppb Tone to maintain rheologies, 1 ppb Lime to increase Alkalinity, 2 ppb Mul to increase es, 1 ppb LEM to maintain 6/3 rpm, 0.5 ppb Gilsonite & Soltex to maintain HTHP & shale stability.

Drilling Fluid Activity Last 24 Hrs:Building 225 bbl batches of OBM slurry as needed for volume in MT2. Circ hole clean prior to trip. Monitor well on trip tank during tripping ops. Rec 17,130 gal mud diesel. Rec load of OBM chemicals. Rec 16-170 mesh screens.

Rig Activity Last 24 Hours:Drilled lateral f/ 10,100' t/ 11,863'. Circ hole clean flow checked well was static. POOH due t/ shock/vibe/steering. C/O BHA. Shallow test RSS, TIH. Drilling parameters: ROP- 150', WOB-50K, Rotary;50 RPM, Bit- 181 RPM, Tq- 16 KLB-Ft, Diff- 550 PSI. P/U 220k, S/O 185k, ROT 205K. Lithology @ 11,863'
100% SH, TR% LS. Ftg Drilled Last 24hrs: 1,763'. Currently TIH at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL	4771	1549			12,383	19441
DIESEL	MUD	GAL	9826	13947			17,781	35998
WATER	FRESH	BBL	0	0		nitial Reading: 77,656 Final Reading: 77,656	0	12392

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
TRANSPORTATION	MISCELLANEOUS	EA	1	1	0.0	4
BARITE - BULK	WEIGHTING MATERIAL	TON		5	34.02	25
DD LEM	LOW END MODIFIER	GAL	550	275	1,100.0	825
DDF MUL	ALL IN ONE EMULSIFIER	GAL	1100	100	1,375.0	825
DD TONE	ORGANOPHILLIC CLAY	SACK	100	9	330.0	110
LIME	ALKALINITY CONTROL	SACK	100	30	180.0	127
SOLTEX	FILTRATE CONTROL	LB	40	15	80.0	202
XMP GILSONITE	FILTRATE CONTROL	LB	50	12	128.0	52
CALCIUM CARBONATE FINE	LOST CIRCULATION	LB		8	55.0	16
CALCIUM CARBONATE MEDIUM	LOST CIRCULATION	LB		8	55.0	16
PRO SWEEP AID	LOST CIRCULATION	LB		30	180.0	60

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

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

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
11,116.00	89.55	165.09	8,916.29	2,503.49	-2,661.58	-318.42	0.20
11,206.00	90.32	164.76	8,916.39	2,593.47	-2,748.48	-295.01	0.93
11,296.00	90.81	165.47	8,915.51	2,683.46	-2,835.46	-271.89	0.96
11,386.00	89.92	165.54	8,914.93	2,773.45	-2,922.59	-249.37	0.99
11,477.00	90.78	167.19	8,914.38	2,864.45	-3,011.02	-227.92	2.04
11,567.00	90.10	160.45	8,913.68	2,954.33	-3,097.40	-202.85	7.53
11,658.00	87.82	164.25	8,915.34	3,045.12	-3,184.08	-175.27	4.87
11,748.00	92.20	171.28	8,915.32	3,134.99	-3,271.96	-156.22	9.20

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	8,812.0
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	8,835.4
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	8,861.4
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	8,897.7
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	8,902.5
ILP	-5,920.0		8,913.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM
GALLAGHER, JEFFERY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-282-4788	JEFFERY.GALLAGHER@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2

GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	884.00
Days Since RI:	884.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/07/2023
Report #:	12
DFS:	10
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$136,391.57

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
3,774.00	23.00	100.00	15,787.0	19,619.0	$136,391.57	$2,128,713.64

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
164.1	1.00	0.00	8,959.3	8,963.1	$11,631.00	$93,271.12	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	3,000.0	3,000.0	Goal Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PRODUCTION, 19,600.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
743.00	2,359.00	750.00	1,052.00	2,359.00	1,162.00

Operations Summary

Driil Production Lateral F/ 12,013' T/ 15,787' (INC - .89.97°, AZI - 166.96°, Above - 1.3', Left - 3.3', AVG DLS -2.57)

Operations Next Report Period

Driil Production Lateral T/ 18787'

Operations At Report Time

Drill Production Lateral @ 15,787'

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 60%

Time Log

Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	11	17:00	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 12,013' T/ 14,032' (2019'' @ 184' FPH), 650 GPMs, 100 RPM, 40K WOB, 3500 SPP, 14-15K torque	12,013.0	14,032.0		
17:00	0.5	17:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	14,032.0	14,032.0		
17:30	10.5	04:00	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 14032' T/ 15,568' (1,536' @ 146 FPH), 650 GPMs, 100 RPM, 40K WOB, 3500 SPP, 14-15K torque	14,032.0	15,568.0		
04:00	0.5	04:30	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	15,568.0	15,568.0		
04:30	1.5	06:00	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 15568' T/ 15787' (219' @ 146 FPH), 625 GPMs, 50 RPM, 40K WOB, 3500 SPP, 14-15K torque	15,568.0	15,787.0		

Drill Strings

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, DD506TSX, 5372111		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	25.25	3,924.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
25.25	3,924.00	155.4	11,863.0	15,787.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
262	DRILL PIPE	5	3.83	15,579.41	15,787.00	303,798.5	304	RIG
1	SUB - FILTER	6 3/4	2.75	4.17	207.59		0	GE/BAKER HUGHES
3	DRILL PIPE	5	3.83	90.00	203.42		0	RIG
1	MOTOR - STABILIZER SLEEVE	4.778	3.25	43.00	113.42		0	GE/BAKER HUGHES
1	SUB - SHOCK	6 3/4	2.75	17.24	70.42		0	TOMAX

1	DRILL COLLAR - PONY	6.96	3.00	9.98	53.18		0	GE/BAKER HUGHES
1	STABILIZER	7.04	2.75	4.84	43.20		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.38	38.36		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.63	25.98		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.34	10.35		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15013762	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	17:00	12,013.0	2,019.00	183.5	40	80	350.0	625	3,500.0	184.0	205	230	170	205	11.0	6.0	
17:00	17:30	14,032.0	0.00		0	0	350.0	625	3,500.0	0.0	205	230	170	205	11.0	6.0	
17:30	04:00	14,032.0	1,536.00	146.3	40	50	350.0	600	3,500.0	146.0	205	230	170	205	11.0	6.0	
04:00	04:30	15,568.0	0.00		0	0	350.0	600	3,500.0	0.0	205	230	170	205	11.0	6.0	
04:30	06:00	15,568.0	219.00	146.0	40	50	350.0	600	3,500.0	146.0	205	230	170	205	11.0	6.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.50	8.88	163.2	2.9	246.1	466.2	16.8	648.2	223.81	411.15	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/6/2023 22:30	PIONEER DRILLING FLUIDS	OIL BASE	14,690.0	8.50	51	122.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
13.0	7.000	5	6	0.0	8.0	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	2.9	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
20,000	7,000.000	0	74.5/25.5	612.0	2.2	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
7.000	12.000	14.000

Comment

Recommeded Fluid Treatment:MW 8.4 ppg. Diesel at 7.13 BPH. Water at 2.68 BPH. Treatment: 1 ppb Tone to maintain rheologies, 1 ppb Lime to increase Alkalinity, 2 ppb Mul to increase es, 1 ppb LEM to maintain 6/3 rpm, 0.5 ppb Gilsonite & Soltex to maintain HTHP & shale stability.

Drilling Fluid Activity Last 24 Hrs:Building 225 bbl batches of OBM slurry as needed for volume in MT2. Xfer f/ MT2 t/ active as needed for volume. Rec 7,306 gal mud diesel.

Rig Activity Last 24 Hours:TIH. Drilled lateral f/ 11,863' t/ 14,690'. Drilling parameters: ROP- 200', WOB-40K, Rotary- 80 RPM, Bit- 205 RPM, Tq- 16 KLB-Ft, Diff- 550 PSI. P/U 235k, S/O 165k, ROT 205K. Lithology @ 14,500' 100% SH, TR% LS. Ftg Drilled Last 24hrs: 2,827'. Currently drilling lateral at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6

INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL	7306				25,087	35998
DIESEL	MUD	GAL		15371			9,716	51369
DIESEL	FUEL	GAL		2916			9,467	22357

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
DD LEM	LOW END MODIFIER	GAL		275	825.0	1,100
DDF MUL	ALL IN ONE EMULSIFIER	GAL		275	1,100.0	1,100
DD TONE	ORGANOPHILLIC CLAY	SACK		10	320.0	120
LIME	ALKALINITY CONTROL	SACK		55	125.0	182
SOLTEX	FILTRATE CONTROL	LB		20	60.0	222
XMP GILSONITE	FILTRATE CONTROL	LB		21	107.0	73

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
3	14,032.0	1/6/2023 22:01	355.0	30	106	95
3	14,032.0	1/6/2023 22:02	430.0	40	141	95
2	14,032.0	1/6/2023 22:04	275.0	20	70	95
2	14,032.0	1/6/2023 22:04	350.0	30	106	95
2	14,032.0	1/6/2023 22:04	440.0	40	141	95
3	15,568.0	1/7/2023 04:14	340.0	20	70	95
3	15,568.0	1/7/2023 04:14	400.0	30	106	95
3	1,568.0	1/7/2023 04:15	500.0	40	141	95
2	15,568.0	1/7/2023 04:15	350.0	20	70	95
2	15,568.0	1/7/2023 04:15	415.0	30	106	95
2	15,568.0	1/7/2023 04:16	500.0	40	141	95
1	15,568.0	1/7/2023 04:16	330.0	20	70	95
1	15,568.0	1/7/2023 04:16	400.0	30	106	95
1	15,568.0	1/7/2023 04:17	505.0	40	141	95

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
12,018.00	89.26	167.65	8,897.69	3,403.99	-3,534.69	-98.01	4.57
12,109.00	88.21	164.92	8,899.70	3,494.95	-3,623.07	-76.45	3.21
12,198.00	89.38	164.94	8,901.58	3,583.92	-3,708.99	-53.31	1.31
12,289.00	89.54	164.29	8,902.43	3,674.89	-3,796.72	-29.17	0.74
12,379.00	89.20	163.09	8,903.42	3,764.82	-3,883.09	-3.90	1.39
12,470.00	88.92	163.35	8,904.92	3,855.71	-3,970.20	22.37	0.42
12,560.00	88.37	163.92	8,907.04	3,945.61	-4,056.53	47.72	0.88
12,650.00	87.10	165.28	8,910.60	4,035.52	-4,143.23	71.60	2.07
12,741.00	84.63	170.43	8,917.17	4,126.19	-4,231.92	90.69	6.26
12,831.00	89.91	169.16	8,921.45	4,215.84	-4,320.37	106.62	6.03
12,922.00	88.80	167.87	8,922.48	4,306.74	-4,409.53	124.74	1.87
13,012.00	88.52	168.81	8,924.58	4,396.63	-4,497.65	142.92	1.09
13,102.00	88.95	167.47	8,926.57	4,486.54	-4,585.71	161.41	1.56
13,193.00	89.51	165.33	8,927.79	4,577.52	-4,674.14	182.81	2.43
13,283.00	86.79	162.17	8,930.70	4,667.39	-4,760.48	207.97	4.63
13,374.00	86.64	167.38	8,935.91	4,758.19	-4,848.11	231.82	5.72
13,464.00	90.52	170.47	8,938.15	4,848.01	-4,936.38	249.10	5.51
13,555.00	89.26	164.99	8,938.32	4,938.92	-5,025.27	268.43	6.18
13,645.00	88.86	165.02	8,939.80	5,028.90	-5,112.19	291.71	0.45
13,736.00	88.21	164.95	8,942.12	5,119.86	-5,200.06	315.28	0.72
13,826.00	90.15	163.82	8,943.41	5,209.82	-5,286.72	339.50	2.49
13,916.00	87.29	168.08	8,945.42	5,299.76	-5,373.98	361.34	5.70
14,007.00	91.23	165.57	8,946.60	5,390.72	-5,462.55	382.07	5.13
14,097.00	89.11	161.78	8,946.33	5,480.63	-5,548.90	407.36	4.82
14,188.00	89.23	160.63	8,947.65	5,571.31	-5,635.04	436.68	1.27
14,278.00	89.14	161.00	8,948.93	5,660.95	-5,720.03	466.25	0.42

14,368.00	88.24	166.24	8,950.99	5,750.83	-5,806.32	491.62	5.91
14,459.00	88.61	167.71	8,953.49	5,841.77	-5,894.95	512.12	1.67
14,549.00	89.51	166.58	8,954.97	5,931.74	-5,982.68	532.14	1.60
14,640.00	89.60	166.36	8,955.67	6,022.73	-6,071.15	553.43	0.26
14,730.00	89.23	166.62	8,956.59	6,112.72	-6,158.65	574.45	0.50
14,820.00	89.51	165.68	8,957.58	6,202.71	-6,246.03	596.00	1.09
14,911.00	90.43	167.63	8,957.63	6,293.70	-6,334.57	617.00	2.37
15,001.00	90.15	166.04	8,957.17	6,383.68	-6,422.20	637.50	1.79
15,092.00	90.03	166.86	8,957.03	6,474.68	-6,510.66	658.82	0.91
15,182.00	90.12	166.93	8,956.91	6,564.66	-6,598.32	679.22	0.13
15,272.00	88.98	166.68	8,957.62	6,654.65	-6,685.94	699.77	1.30
15,363.00	90.00	166.77	8,958.43	6,745.63	-6,774.50	720.66	1.13
15,453.00	89.78	166.26	8,958.60	6,835.63	-6,862.02	741.65	0.62

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	8,812.0
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	8,835.4
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	8,861.4
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	8,897.7
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	8,902.5
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM
GALLAGHER, JEFFERY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-282-4788	JEFFERY.GALLAGHER@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	885.00
Days Since RI:	885.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/08/2023
Report #:	13
DFS:	11
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$79,637.99

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
3,424.00	23.00	100.00	19,211.0	19,619.0	$79,637.99	$2,208,351.63

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
148.9	1.00	0.00	8,961.0	8,963.1	$8,072.25	$101,343.37	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	3,000.0	383.0	Goal Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes		INTERMEDIATE, 6,950.0ftKB	PRODUCTION, 19,574.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
720.00	0.00	715.00	906.00	0.00	863.00

Operations Summary

Driil Production Lateral F/ 15,787' T/ 19211' (INC - .89.88°, AZI - 166.70°, Below - 0.5', Right - 8.3', AVG DLS -2.12)

Operations Next Report Period

Driil Production Lateral T/ TD 19594+-', Perform K&M cleanup cycle,TOOH, L/D BHA

Operations At Report Time

Drill Production Lateral @ 19,211'

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 98%

Time Log

Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	9.75	15:45	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 15787' T/ 17376' (1589'' @ 163' FPH), 600 GPMs, 50 RPM, 40K WOB, 3800 SPP, 18K torque	15,787.0	17,376.0		
15:45	0.5	16:15	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	17,376.0	17,376.0		
16:15	12	04:15	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 17,376' T/ 19,091' (1,715' @ 143 FPH), 600 GPMs, 50 RPM, 42K WOB, 3900 SPP, 21K torque	17,376.0	19,091.0		
04:15	0.5	04:45	PROD, DRL LAT	RIG_SVC	NORMAL	Rig Service	19,091.0	19,091.0		
04:45	1.25	06:00	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 19,091' T/ 19211' (120' @ 96 FPH), 600 GPMs, 50 RPM, 40K WOB, 3900 SPP, 21K torque	19,091.0	19,211.0		

Drill Strings

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, DD506TSX, 5372111		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	-------	48.25	7,348.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
48.25	7,348.00	152.3	11,863.0	19,211.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
262	DRILL PIPE	5	3.83	19,003.41	19,211.00	370,566.5	371	RIG
1	SUB - FILTER	6 3/4	2.75	4.17	207.59		0	GE/BAKER HUGHES
3	DRILL PIPE	5	3.83	90.00	203.42		0	RIG
1	MOTOR - STABILIZER SLEEVE	4.778	3.25	43.00	113.42		0	GE/BAKER HUGHES
1	SUB - SHOCK	6 3/4	2.75	17.24	70.42		0	TOMAX

1	DRILL COLLAR - PONY	6.96	3.00	9.98	53.18		0	GE/BAKER HUGHES
1	STABILIZER	7.04	2.75	4.84	43.20		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.38	38.36		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.63	25.98		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.34	10.35		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15013762	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

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	15:45	15,787.0	1,589.00	163.0	40	50	750.0	600	3,800.0	163.0	205	235	150	205	18.0	6.0	
15:45	16:15	17,376.0	0.00		0	0	750.0	600	3,800.0	0.0	205	235	150	205	18.0	6.0	
16:15	04:15	17,376.0	1,715.00	142.9	42	50	750.0	600	3,850.0	143.0	205	235	150	205	21.0	6.0	
04:15	04:45	19,091.0	0.00		0	0	750.0	600	3,850.0	0.0	205	235	150	205	21.0	6.0	
04:45	06:00	19,091.0	120.00	96.0	42	50	750.0	600	3,850.0	140.0	205	235	150	205	21.0	6.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.50	8.99	163.2	2.9	246.1	466.2	16.8	648.2	272.50	568.31	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/7/2023 22:30	PIONEER DRILLING FLUIDS	OIL BASE	18,400.0	8.50	52	116.0

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
12.0	7.000	4	5	0.0	7.5	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	3.1	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
16,000	8,000.000	0	75.5/24.5	654.0	2.2	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
6.000	11.000	13.000

Comment

Recommeded Fluid Treatment:MW 8.4-8.5ppg. Diesel at 5.35 BPH. Water at 2.68 BPH. Treatment: 1 ppb Tone to maintain rheologies, 0.5 ppb Lime to maintain Alkalinity, 1 ppb Mul to maintain es, 1 ppb LEM to maintain 6/3 rpm, 0.5 ppb Gilsonite & Soltex to maintain HTHP & shale stability.

Drilling Fluid Activity Last 24 Hrs:Building 225 bbl batches of OBM slurry as needed for volume in MT2. Xfer f/ MT2 t/ active as needed for volume. Running centrifuge as needed to control MW. C/O 3-170 mesh shaker screens.

Rig Activity Last 24 Hours:Drilled lateral f/ 14,690' t/ 18,400'. Drilling parameters: ROP- 175', WOB-42K, Rotary- 50 RPM, Bit- 171 RPM, Tq- 21 KLB-Ft, Diff- 600 PSI. P/U 250k, S/O 120k, ROT 200K. Lithology @ 18,310' 100% SH. Ftg Drilled Last 24hrs: 3,710'. Currently drilling lateral at time of report

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		

SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	MUD	GAL		5531			4,185	56900
DIESEL	FUEL	GAL		2820			6,647	25177

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
DD LEM	LOW END MODIFIER	GAL		225	600.0	1,325
DDF MUL	ALL IN ONE EMULSIFIER	GAL		225	875.0	1,325
LIME	ALKALINITY CONTROL	SACK		30	95.0	212
SOLTEX	FILTRATE CONTROL	LB		10	50.0	232
XMP GILSONITE	FILTRATE CONTROL	LB		10	97.0	83

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

Pump #	Depth (ftKB)	Time	P (psi)	Strokes (spm)	Q Flow (gpm)	Eff (%)
3	19,091.0	1/8/2023 04:36	325.0	20	70	95
3	19,091.0	1/8/2023 04:36	405.0	30	106	95
3	19,091.0	1/8/2023 04:37	535.0	40	141	95
2	19,091.0	1/8/2023 04:37	350.0	20	70	95
2	19,091.0	1/8/2023 04:37	425.0	30	106	95
2	19,091.0	1/8/2023 04:37	510.0	40	141	95
1	19,091.0	1/8/2023 04:38	320.0	20	70	95
1	19,091.0	1/8/2023 04:38	415.0	30	106	95
1	19,091.0	1/8/2023 04:38	525.0	40	141	95

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
15,815.00	89.29	167.23	8,960.46	7,197.58	-7,214.26	825.13	0.95
15,905.00	89.82	166.90	8,961.16	7,287.56	-7,301.97	845.27	0.69
15,996.00	89.60	166.88	8,961.62	7,378.55	-7,390.60	865.91	0.24
16,086.00	90.09	167.29	8,961.86	7,468.52	-7,478.32	886.03	0.71
16,176.00	91.29	166.07	8,960.78	7,558.51	-7,565.89	906.76	1.90
16,267.00	90.52	164.35	8,959.34	7,649.48	-7,653.86	929.99	2.07
16,357.00	90.28	165.50	8,958.71	7,739.47	-7,740.76	953.39	1.31
16,447.00	89.66	164.11	8,958.76	7,829.45	-7,827.61	976.98	1.69
16,538.00	89.29	164.67	8,959.59	7,920.41	-7,915.25	1,001.47	0.74
16,628.00	89.88	167.08	8,960.25	8,010.41	-8,002.52	1,023.43	2.76
16,719.00	90.03	165.42	8,960.32	8,101.40	-8,090.91	1,045.06	1.83
16,809.00	88.98	165.24	8,961.10	8,191.39	-8,177.97	1,067.85	1.18
16,899.00	88.49	164.16	8,963.08	8,281.35	-8,264.75	1,091.59	1.32
16,990.00	90.15	165.96	8,964.16	8,372.33	-8,352.67	1,115.05	2.69
17,080.00	90.77	165.73	8,963.44	8,462.32	-8,439.93	1,137.06	0.73
17,170.00	91.36	165.44	8,961.77	8,552.31	-8,527.08	1,159.46	0.73
17,260.00	90.46	165.08	8,960.34	8,642.29	-8,614.11	1,182.35	1.08
17,351.00	90.15	165.42	8,959.85	8,733.28	-8,702.11	1,205.52	0.51
17,441.00	90.52	167.22	8,959.33	8,823.27	-8,789.55	1,226.81	2.04
17,531.00	89.48	163.68	8,959.33	8,913.25	-8,876.65	1,249.41	4.10
17,621.00	89.26	165.76	8,960.32	9,003.23	-8,963.46	1,273.13	2.32
17,711.00	90.62	165.65	8,960.41	9,093.22	-9,050.67	1,295.35	1.52
17,801.00	90.71	164.62	8,959.37	9,183.21	-9,137.65	1,318.44	1.15
17,892.00	90.18	167.59	8,958.66	9,274.19	-9,225.97	1,340.29	3.32
17,982.00	91.14	166.54	8,957.62	9,364.17	-9,313.68	1,360.43	1.58
18,072.00	89.41	167.28	8,957.19	9,454.15	-9,401.34	1,380.81	2.09
18,163.00	89.69	166.04	8,957.91	9,545.13	-9,489.88	1,401.81	1.40
18,253.00	89.75	164.98	8,958.35	9,635.13	-9,577.01	1,424.33	1.18
18,343.00	89.66	166.42	8,958.81	9,725.13	-9,664.22	1,446.55	1.60
18,433.00	89.94	167.07	8,959.12	9,815.11	-9,751.82	1,467.19	0.79
18,523.00	89.78	167.05	8,959.34	9,905.09	-9,839.53	1,487.34	0.18
18,614.00	89.48	167.81	8,959.93	9,996.06	-9,928.35	1,507.15	0.90

18,704.00	90.22	167.07	8,960.17	10,086.02	-10,016.20	1,526.72	1.16
18,795.00	90.09	167.03	8,959.92	10,177.00	-10,104.88	1,547.11	0.15
18,885.00	89.78	166.91	8,960.02	10,266.99	-10,192.56	1,567.40	0.37

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0	9,026.0	8,812.0
268_5_SPBY_L_A2	-6,023.0		9,016.0	9,077.0	8,835.4
268_5_SPBY_L_A3	-6,108.0		9,101.0	9,155.0	8,861.4
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0	9,355.0	8,897.7
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0	9,409.0	8,902.5
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM
GALLAGHER, JEFFERY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-282-4788	JEFFERY.GALLAGHER@PXD.COM

Personnel Log

Company	Count
PIONEER NATURAL RESOURCES USA INC	2
ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

Generated by WellDrive®

ENSIGN 125	
Accept:	12/29/2022
Release:	
Days Since LTI:	886.00
Days Since RI:	886.00

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	ODR
Report Date:	01/09/2023
Report #:	14
DFS:	12
AFE #:	9023600
Total AFE + Sup:	$3,472,933.43
Daily Field Est. (Cost):	$109,029.13

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	1/8/2023

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30		IN PROGRESS

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.
TXRRC CALL	CEMENT PROD	1/8/2023 21:30	Sandy #5

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
379.00	2.50	100.00	19,590.0	19,619.0	$109,029.13	$2,317,380.76

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
151.6	6.00	0.00	8,957.5	8,963.1	$6,215.20	$107,558.57	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	383.0	0.0	Goal Met TD Well

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes	Toe Flat	INTERMEDIATE, 6,950.0ftKB	PRODUCTION, 19,572.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
651.00	669.00	0.00	580.00	0.00	651.00

Operations Summary

Driil Production Lateral T/ TD 19594+-', Perform K&M cleanup cycle,TOOH, L/D BHA, R/U casing tools, RIH with production casing T/3,234'.

Operations Next Report Period

RIH with 5.5" production casing & land in wellhead @ 19,574', circulate STS, Cement production casing

Operations At Report Time

Running Production casing @ 3234'

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 100%

Time Log

Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs	Prob Ref #
06:00	2.5	08:30	PROD, DRL LAT	DRL	NORMAL	Drill Production lateral F/ 19,211' T/ 19590' (379' @ 152 FPH), 600 GPMs, 50 RPM, 40K WOB, 3900 SPP, 21K torque	19,211.0	19,590.0		
08:30	6	14:30	PROD, POST DRL	CIRC	NORMAL	Circulate K&M cylce 6 bttms up. FULL returns while circulating wellbore clean.	19,590.0	19,590.0		
14:30	0.25	14:45	PROD, POST DRL	FLOW_CHK	NORMAL	Flow Check, Well Static	19,590.0	19,590.0		
14:45	0.25	15:00	PROD, POST DRL	TOOH_ELEV	NORMAL	TOOH 10 stands F/19,590' T/18,600'. Top filling with trip tanks. Hole taking proper fill on trip out.	19,590.0	19,590.0		
15:00	0.25	15:15	PROD, POST DRL	FLOW_CHK	NORMAL	Flow Check Well Static	19,590.0	19,590.0		
15:15	0.25	15:30	PROD, POST DRL	CIRC	NORMAL	Pump Slug	19,590.0	19,590.0		
15:30	7	22:30	PROD, POST DRL	TOOH_ELEV	NORMAL	Trip out of F/18,600' T/117'. Top filling with trip tanks. Hole taking proper fill.	19,590.0	19,590.0		
22:30	0.25	22:45	PROD, POST DRL	SFTY	NORMAL	PJSM on L/D BHA	19,590.0	19,590.0		
22:45	0.75	23:30	PROD, POST DRL	LD_DIR	NORMAL	L/D all Directional tools	19,590.0	19,590.0		
23:30	0.25	23:45	PROD, POST DRL	WRBSH	NORMAL	Pull wear bushing	19,590.0	19,590.0		
23:45	0.75	00:30	PROD, POST DRL	SFTY	NORMAL	Clean rig floor and PJSM R/U casing crew	19,590.0	19,590.0		

00:30	0.75	01:15	PROD, CASE & CMT	RU_CSG	NORMAL	R/U CSI casing crew	19,590.0	19,590.0		
01:15	0.25	01:30	PROD, CASE & CMT	SFTY	NORMAL	PJSM on running 5.5" production casing	19,590.0	19,590.0		
01:30	0.25	01:45	PROD, CASE & CMT	MU_SHOE_TRK	NORMAL	Make up shoe track and test float	19,590.0	19,590.0		
01:45	4.25	06:00	PROD, CASE & CMT	CSG_W/O ROTATION	NORMAL	RIH with production casing T/3,234'. Hole giving proper displacement while tripping in.	19,590.0	19,590.0		

Drill Strings

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, DD506TSX, 5372111		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	1-1-NO-A-X-0-NO-TD	50.75	7,727.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
50.75	7,727.00	152.3	11,863.0	19,590.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
431	DRILL PIPE	5	3.83	19,382.41	19,590.00	377,957.0	378	RIG
1	SUB - FILTER	6 3/4	2.75	4.17	207.59		0	GE/BAKER HUGHES
3	DRILL PIPE	5	3.83	90.00	203.42		0	RIG
1	MOTOR - STABILIZER SLEEVE	4.778	3.25	43.00	113.42		0	GE/BAKER HUGHES
1	SUB - SHOCK	6 3/4	2.75	17.24	70.42		0	TOMAX
1	DRILL COLLAR - PONY	6.96	3.00	9.98	53.18		0	GE/BAKER HUGHES
1	STABILIZER	7.04	2.75	4.84	43.20		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.38	38.36		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.63	25.98		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.34	10.35		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15013762	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

Drilling Parameters

Start Time	End Time	Start Depth (ftKB)	Int Depth (ft)	Int ROP (ft/hr)	WOB (1000lbf)	RPM	dP (SPP) (psi)	Q Flow (gpm)	SPP (psi)	ROP Average (ft/hr)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Off-Btm Str Wt (1000lbf)	Drill Tq	Off Btm Tq	TFO (°)
06:00	08:30	19,211.0	379.00	151.6	42	50	750.0	600	3,850.0	152.0	205	235	150	205	21.0	11.0	
08:30	14:30	19,590.0	0.00		0	50	0.0	600	3,850.0	0.0	205	235	150	205	0.0	11.0	

Hydraulic Calculations

Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)
8.50	9.01	163.2	2.9	246.1	466.2	16.8	648.2	277.89	585.71	357.52

Mud Checks

Time	Mud Company	Type	Depth (ftKB)	Density (lb/gal)	Funnel Viscosity (s/qt)	T Flowline (° F)
1/8/2023 22:30	PIONEER DRILLING FLUIDS	OIL BASE	19,590.0	8.50	55	

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
12.0	8.000	5	6	0.0	7.8	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	3.1	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
15,000	7,000.000	0	75/25	657.0	2.1	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
7.000	14.000	14.000

Comment

Recommeded Fluid Treatment:No treatment needed at this time.

Drilling Fluid Activity Last 24 Hrs: Xfer f/ MT2 t/ active as needed for volume. Running centrifuge as needed to control MW. Performed 5.5 b/u CUC monitored shakers during CUC. Flow checked well was static. Pulled t/ 18,600' no issues pumped slug. Monitored well on trip tank during tripping ops. 7,303-gal mud diesel rec.

Rig Activity Last 24 Hours:Drilled lateral f/ 18,400' t/ 19,590'. TD'd well. Performed CUC, flow checked well was static pulled t/ 18,600' pumped slug. POOH. L/D BHA. Drilling parameters: ROP- 175', WOB-42K, Rotary- 50 RPM, Bit;171 RPM, Tq- 21 KLB-Ft, Diff- 475 PSI. P/U 245k, S/O 125k, ROT 200K. Lithology @ 19,590' 100% SH, TR % LS. Ftg Drilled Last 24hrs: 1,190'. Currently R/U csg crew at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL	7299	1934			12,012	27111
DIESEL	MUD	GAL	7303	2995			8,493	59895

Mud Additive Amounts

Des	Type	Units	Rec	Consumed	On Loc	Cum Cons
BARITE - BULK	WEIGHTING MATERIAL	TON		11	23.02	36
DD LEM	LOW END MODIFIER	GAL		100	500.0	1,425
DDF MUL	ALL IN ONE EMULSIFIER	GAL		25	850.0	1,350
LIME	ALKALINITY CONTROL	SACK		11	84.0	223
SOLTEX	FILTRATE CONTROL	LB		12	38.0	244
XMP GILSONITE	FILTRATE CONTROL	LB		12	85.0	95

Pump Operations

Pump #	Make	Model	Liner Size (in)	Stroke (in)	Vol/Stk (bbl/stk)	P Max (psi)
1	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

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

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Survey Data - All surveys for 24 hr reporting period

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
19,247.00	90.15	165.97	8,959.04	10,628.97	-10,544.15	1,653.57	0.20
19,337.00	90.55	165.83	8,958.49	10,718.97	-10,631.44	1,675.49	0.47
19,427.00	90.06	166.26	8,958.02	10,808.97	-10,718.78	1,697.20	0.72
19,518.00	90.22	165.91	8,957.79	10,899.97	-10,807.11	1,719.08	0.42
19,565.00	90.22	165.91	8,957.61	10,946.97	-10,852.69	1,730.52	0.00

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0		
268_5_SPBY_L_A2	-6,023.0		9,016.0		
268_5_SPBY_L_A3	-6,108.0		9,101.0		
268_6_SPBY_L_B1/JO MILL	-6,262.0		9,255.0		
268_7_SPBY_L_C1/LOWER SPRABERRY SHALE	-6,321.0		9,314.0		
PBHL/TD	-5,970.0		8,963.0		
269_0_DEAN	-6,633.0		9,626.0		
270_0_WFMP_A1	-6,802.0		9,795.0		
275_0_WFMP_B1	-7,009.0		10,002.0		
276_0_WFMP_B2	-7,031.0		10,024.0		
278_0_WFMP_B3	-7,085.0		10,078.0		
280_0_WFMP_C1	-7,175.0		10,168.0		
282_0_WFMP_C2	-7,275.0		10,268.0		
292_0_WFMP_D	-7,701.0		10,694.0		
304_0_STRAWN	-8,065.0		11,058.0		

Daily Contacts

Job Contact	Title	Office	Mobile	Email
JACKSON, AUSTIN, ENGINEER	ENGINEER	972-969-5954	469-503-1379	AUSTIN.JACKSON@PXD.COM
COX, BRYAN, ENGINEER	ENGINEER	972-969-5717	361-318-4212	BRYAN.COX@PXD.COM
KUMAR, DEV, ENGINEER	ENGINEER		469-865-6956	DEV.KUMAR@PXD.COM
POLYA, JOE, AREA DRILLING SUPERINTENDENT	AREA DRILLING SUPERINTENDENT	432-413-6147	432-352-3155	JOE.POLYA@PXD.COM
GARZA, JOHN, ENGINEER	ENGINEER		469-286-7746	JOHN.GARZA@PXD.COM
VOGEL, WILLIS, SUPERINTENDENT	SUPERINTENDENT		432-301-6784	WILLIS.VOGEL@PXD.COM
BROWN, KEITH, SUPERINTENDENT	SUPERINTENDENT	972-313-9798	469-516-3137	KEITH.BROWN@PXD.COM
DOYLE, ANTHONY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-452-0523	ANTHONY.DOYLE@PXD.COM
HENZE, BRENDON, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		361-935-5507	BRENDON.HENZE@PXD.COM
LIGHTSEY, WADE, MUD ENGINEER	MUD ENGINEER		210-834-7068	WADE.LIGHTSEY@PXD.COM
RIG-ENSIGN 125, RIG PHONE	RIG PHONE	432-848-5232	432-894-8995	DL-ENSIGN125@PXD.COM
GALLAGHER, JEFFERY, WELLSITE SUPERVISOR	WELLSITE SUPERVISOR		318-282-4788	JEFFERY.GALLAGHER@PXD.COM

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Company	Count
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ENSIGN UNITED STATES DRILLING S W INC	13
BAKER HUGHES OILFIELD OPERATIONS INC	2
GISLER BROTHERS LOGGING CO INC	2
STALLION SOLIDS CONTROL INC	1

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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ENSIGN 125	
Accept:	**12/29/2022**
Release:	
Days Since LTI:	**887.00**
Days Since RI:	**887.00**

Daily Drilling Report

PERMIAN ASSET TEAM	
Job:	**ODR**
Report Date:	**01/10/2023**
Report #:	**15**
DFS:	**13**
AFE #:	**9023600**
Total AFE + Sup:	**$3,472,933.43**
Daily Field Est. (Cost):	**$807,091.13**

API/UWI	Well Profile	Open Formation	Field Name
42-003-48664-0000	HORIZONTAL	MIDDLE SPRABERRY (SPBY M A1)	SPRABERRY (TREND AREA)

SSN	Property Sub	KB-Grd (ft)	Orig KB Elevation (ft)	Ground Elevation (ft)	Spud Date	TD Date
ID00034024		25.00	2,993.00	2,968.00	11/10/2022	1/8/2023

Jobs

Responsible Grp 2	Responsible Grp 3	Job Type	Start Date	End Date	Job Status
DRL ENG - JOHN GARZA	AREA TEAM 2	ODR	11/9/2022 22:30	1/10/2023 06:00	COMPLETE

Job Dates (ex. Estimated Pad Release, TXRRC Calls)

Type	Subtype	Date	Note
MILESTONE	ESTIMATED PAD RELEASE	2/5/2023	1st Production of a 5 well pad, Batch Drilling.

Daily Operations

Footage/Meterage (ft)	Drilling Hours	% Rotating Time	End Depth (ftKB)	Target Depth (ftKB)	Daily Field Est Total	Cum Field Est To Date
0.00			19,590.0	19,619.0	$807,091.13	$3,124,471.89

24 HR ROP (ft/hr)	Circulating Hours	% Sliding Time	End Depth (TVD) (ftKB)	Target Depth Depth (TVD) (ftKB)	Daily Mud Field Est Total	Cum Mud Field Est	Total AFE + Sup
			8,957.5	8,963.1	$	$107,558.57	$3,472,933.43

Daily Goal Description	Daily Goal - Last 24	Daily Goal - Next 24	Goal Comments
DRILLED FEET	0.0	0.0	Goal Met

Backbuild	Lateral Inclination	Last Casing String	Next Casing String
Yes	Toe Flat	INTERMEDIATE, 6,950.0ftKB	PRODUCTION, 19,572.0ftKB

Avg Connection Gas	Avg Trip Gas	Avg Background Gas	Max Connection Gas	Max Trip Gas	Max Drill Gas
238.00	238.00	23.00	0.00	238.00	0.00

Operations Summary

RIH with 5.5" production casing & land in wellhead @ 19,574', circulate STS, Cement production casing, Install and test packoff BPV, Nipple down, Release rig to the University 6-48D 104H

Operations Next Report Period

University 6-48D 104H

Operations At Report Time

University 6-48D 104H

Remarks

No incidents reported, No spills recorded.

Rig NPT - Well: 2.25 Total hrs
3rd Party NPT Well: 0 Total hrs
Pioneer NPT Well: 2.75 Total hr
Surf-100%, Int 1- 100%, Curve- 100%, Prod Lat- 100%

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	13.75	19:45	DEMOB, RIG DOWN	CSG_W/O ROTATION	NORMAL	RIH with production casing F/3,234' T/ 19,542'. Hole giving proper displacement while tripping in.	19,590.0	19,590.0		
19:45	0.5	20:15	DEMOB, RIG DOWN	CSG_W/WASH	NORMAL	M/U landing joint and slack off landing out in wellhead at 19,572' while washing down at 7 bpm. Full returns.	19,590.0	19,590.0		
20:15	0.5	20:45	DEMOB, RIG DOWN	RD_CSG	NORMAL	R/D casing equipment & CRT	19,590.0	19,590.0		
20:45	0.25	21:00	DEMOB, RIG DOWN	RU_CMT	NORMAL	R/U cement head and lines	19,590.0	19,590.0		
21:00	1.5	22:30	DEMOB, RIG DOWN	CIRC	NORMAL	Circulate 1.5 casing capacity	19,590.0	19,590.0		
22:30	4.5	03:00	DEMOB, RIG DOWN	CMT	NORMAL	Pressure test lines T/8,000 psi. Pump 50 bbls of 9# Spacer, 230 bbls of 9.3# Lead, 546 bbls of 12.5# Tail. Shut down and drop bottom plug, pump 4 bbls fresh water treated with MMCR, drop top plug and displace with 430 bbls of fresh water. Bumped slug @ 3:00 hrs. Pressured up F/1400' T/2400'. Bled back 3.5 bbls. Floats holding.	19,590.0	19,590.0		
03:00	0.25	03:15	DEMOB, RIG DOWN	FLOW_CHK	NORMAL	Flow check well. Well static	19,590.0	19,590.0		
03:15	0.5	03:45	DEMOB, RIG DOWN	RD_CMT	NORMAL	Rig down cement equipment	19,590.0	19,590.0		
03:45	1.25	05:00	DEMOB, RIG	WH	NORMAL	Flush surface lines, install and test pack-off, install	19,590.0	19,590.0		

			DOWN			BPV				
05:00	0.5	05:30	DEMOB, RIG DOWN	ND_BOPE	NORMAL	N/D BOP	19,590.0	19,590.0		
05:30	0.5	06:00	DEMOB, RIG DOWN	WH	NORMAL	Install TA cap and release rig to the University 6-48D 104H	19,590.0	19,590.0		

Drill Strings

BHA #5 , PRODUCTION - LATERAL

Bit Run	Drill Bit		Bit Type	Make
5	8 1/2, DD506TSX, 5372111		PDC	GE/BAKER HUGHES
Nozzles (1/32")	**Bit Total Fluid Area (nozzles) (in²)**	**IADC Bit Dull**	**Hours Drilled By Bit (hr)**	**Depth Drilled By Bit (ft)**
12/12/12/14/14/14	0.78	1-1-NO-A-X-0-NO-TD	50.75	7,727.00
BHA Drilling Time (hr)	**BHA Depth Drilled (ft)**	**BHA ROP (ft/hr)**	**Depth In (ftKB)**	**Depth Out (ftKB)**
50.75	7,727.00	152.3	11,863.0	19,590.0

Drill String Components

Jts	Item Des	OD (in)	ID (in)	Len (ft)	Cum Len (ft)	Wt (lbf)	Cum Wt (1000lbf)	Make
431	DRILL PIPE	5	3.83	19,382.41	19,590.00	377,957.0	378	RIG
1	SUB - FILTER	6 3/4	2.75	4.17	207.59		0	GE/BAKER HUGHES
3	DRILL PIPE	5	3.83	90.00	203.42		0	RIG
1	MOTOR - STABILIZER SLEEVE	4.778	3.25	43.00	113.42		0	GE/BAKER HUGHES
1	SUB - SHOCK	6 3/4	2.75	17.24	70.42		0	TOMAX
1	DRILL COLLAR - PONY	6.96	3.00	9.98	53.18		0	GE/BAKER HUGHES
1	STABILIZER	7.04	2.75	4.84	43.20		0	DRILLING TOOLS INTERNATIONAL
1	RSS TOOL	6.86	2.75	12.38	38.36		0	GE/BAKER HUGHES
1	MWD TOOL - NON-RETRIEVABLE	6.69	2.75	15.63	25.98		0	GE/BAKER HUGHES
1	RSS TOOL	6.99	2.75	9.34	10.35		0	GE/BAKER HUGHES

Mud Motors

SN	Bend Angle	Bearing Type	Lobe Config	# Stages	Lwr Defln Type	Bit To Bend
15013762	0	NOT SEALED	7:8	6.4		0

Sensors

Sensor Type	Sensor-Bit (ft)	Note
GAMMA	12.60	
DIRECTIONAL	22.67	

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)
1/9/2023 22:30	PIONEER DRILLING FLUIDS	OIL BASE	19,590.0	8.50	55	

pV (cP)	YP (lbf/100ft²)	Vis 3rpm	Vis 6rpm	Filtrate (mL/30min)	HTHP Filtrate (mL/30min)	HTHP Temperature (° F)	HTHP Pressure (psi)
12.0	8.000	5	6	0.0	7.8	200.0	500.0

Solids (%)	Low Gravity Solids (%)	Sand (%)	MBT (lb/bbl)	Pm (mL/mL)	Pf (mL/mL)
6.0	3.1	0.0	0.0	0.000	0.0

Chlorides (mg/L)	Calcium (mg/L)	CaCl (ppm)	Oil Water Ratio	Electric Stab (V)	Lime (lb/bbl)	pH
15,000	7,000.000	0	75/25	657.0	2.1	0.0

Gel 10 sec (lbf/100ft²)	Gel 10 min (lbf/100ft²)	Gel 30 min (lbf/100ft²)
7.000	14.000	14.000

Comment

Recommeded Fluid Treatment:No treatment needed at this time.

Drilling Fluid Activity Last 24 Hrs:Monitored csg displacement. Circ 1.5 x csg cap.
Pumped 80 bbls diesel ahead of spacer. Performed
cmt job w/ good returns & lift pressure throughout job.
Flow checked well was static. Flushed lines.
Final OBM strap 2465 bbls.

Rig Activity Last 24 Hours:M/U shoe track & ran 5.5 prod csg t/ 19,572' (no airlock). Circ csg, performed CMT job w/ full returns.
Bumped plug 500psi over floats held. L/D landing jt. Set/test pack off. Set BPV & TA cap. N/D release rig
to the 104H. Drilling parameters: ROP- 175', WOB-42K, Rotary- 50 RPM, Bit- 171 RPM, Tq- 21 KLB-Ft, Diff;475 PSI. P/U 245k, S/O 125k, ROT 200K. Lithology @ 19,590'
100% SH, TR % LS. Ftg Drilled Last 24hrs:
0'. Currently preparing t/ skid rig at time of report.

Last BOP Test

Date	Test Type	Item Tested	Next Test Date	Com
12/29/2022 14:15	BOP	BOP'S, 12/29/2022 13:00	1/19/2023 14:15	Full Test BOPs

Leak Off and Formation Integrity Tests

Test Type	Depth (ftKB)	Dens Fluid (lb/gal)
FORMATION INTEGRITY	2,016.0	12.51
FORMATION INTEGRITY	6,950.0	9.55

Casing Pressure Test

Test Type	Test Subtype	Date	Item Tested	Failed?	Time (min)	P (psi)
CASING	STANDARD	11/17/2022 17:30	SURFACE, 2,016.7ftKB	No	30.00	1,000.0
CASING	STANDARD	1/3/2023 01:00	INTERMEDIATE, 6,950.0ftKB	No	30.00	2,500.0

PIONEER NATURAL RESOURCES

UNIVERSITY 6-48B 102H

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Kick Offs & Key Depths

Date	Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
1/4/2023 02:15	KICK OFF	8,375.0	8,273.4
1/4/2023 19:00	HEEL	9,475.0	8,904.9
1/9/2023 08:30	TOE	19,590.0	8,957.5

Casing Strings

Description	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	OD (in)	Grade	Wt/Len (lb/ft)	Top Thread	P LeakOff (psi)
CONDUCTOR	105.0	105.0	20	H40	78.67		
SURFACE	2,016.7	2,015.0	13 3/8	J55	54.50	BTC	1,308.6
INTERMEDIATE	6,950.0	6,848.5	9 5/8	L80-IC	40.00	BTC	3,398.9

Gas Emissions - Flare

Type	Method	Dur (Min)	Amount	Units	Com
No Data					

Job Supply Amounts

Supply Item Des	Type	Unit Label	Received	Consumed	Returned	Note	Cum On Loc	Cum Consumed
DIESEL	FUEL	GAL		1216			10,796	28327
WATER	FRESH	BBL	11493	11493		Initial Reading: 77,656 Final Reading: 89,149	0	23885

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	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
2	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0
3	BOMCO	F1600	5 1/2	12.00	0.088	7,500.0

Pump Checks

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

Deviation Surveys

Date	Description	Job
11/10/2022 01:30	AS DRILL SURVEY	ODR, 11/9/2022 22:30

Formations

Formation Name	Prog Top Override (TVD SS) (ft(elv))	Prog Top MD (ftKB)	Prog Top (TVD) (ftKB)	Final Top MD (ftKB)	Final Top (TVD) (ftKB)
268_5_SPBY_L_A1	-5,987.0		8,980.0		
268_5_SPBY_L_A2	-6,023.0		9,016.0		
268_5_SPBY_L_A3	-6,108.0		9,101.0		
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