

MS Directional

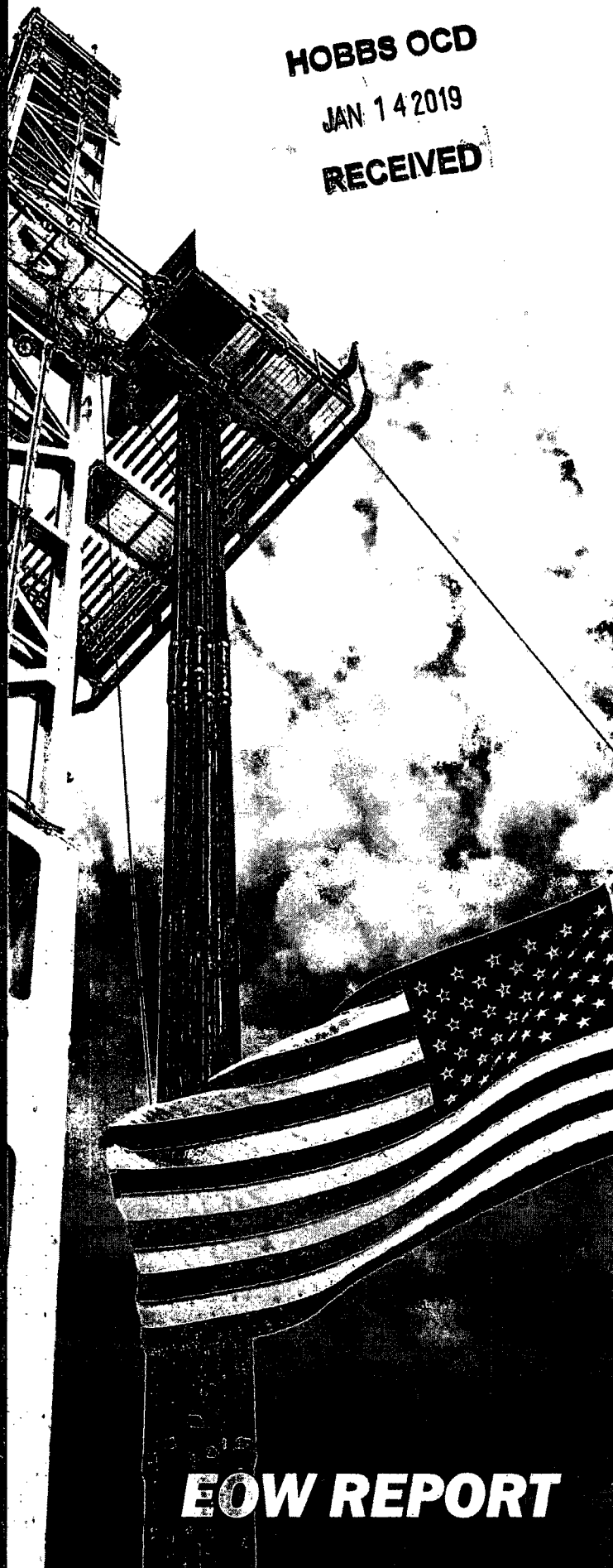
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Breitburn Operating

Encore M State #22
Lea County, New Mexico
Nabors M10

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Breitburn Operating

Lea County, New Mexico (NAD 83)

Encore M State #22

Encore M State #22

Wellbore #1

Design: Surveys

Standard Survey Report

16 November, 2018





MS Directional Survey Report



Company:	Breitburn Operating	Local Co-ordinate Reference:	Well Encore M State #22
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	Well @ 3381.00usft (Nabors M10)
Site:	Encore M State #22	MD Reference:	Well @ 3381.00usft (Nabors M10)
Well:	Encore M State #22	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Project	Lea County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Encore M State #22			
Site Position:		Northing:	501,204.90 usft	Latitude:	32° 22' 21.367 N
From:	Map	Easting:	897,571.70 usft	Longitude:	103° 10' 46.162 W
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	

Well	Encore M State #22					
Well Position	+N/-S	0.00 usft	Northing:	501,204.90 usft	Latitude:	32° 22' 21.367 N
	+E/-W	0.00 usft	Easting:	897,571.70 usft	Longitude:	103° 10' 46.162 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,359.00 usft
Grid Convergence:	0.618 °					

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2018	11/1/2018	6.688	60.214	47,961.22

Design	Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	319.95	

Survey Program	Date 11/15/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
86.00	1,200.00	MS Gyros (Wellbore #1)	IS-GYRO-DROP	MEMS RATE GYRO
1,263.00	6,420.00	MS MWD (Wellbore #1)	MWD	OWSG MWD - Standard

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
86.00	0.93	274.68	86.00	0.06	-0.70	0.49	1.08	1.08	0.00	
176.00	0.76	291.77	175.99	0.34	-1.98	1.53	0.34	-0.19	18.99	
264.00	0.89	287.98	263.98	0.77	-3.17	2.63	0.16	0.15	-4.31	
357.00	0.93	286.11	356.97	1.20	-4.58	3.87	0.05	0.04	-2.01	
446.00	0.96	288.47	445.95	1.63	-5.98	5.10	0.06	0.03	2.65	
537.00	0.81	288.88	536.94	2.08	-7.31	6.30	0.16	-0.16	0.45	
627.00	0.84	285.90	626.93	2.47	-8.55	7.39	0.06	0.03	-3.31	
723.00	0.94	284.34	722.92	2.86	-9.99	8.62	0.11	0.10	-1.63	



MS Directional Survey Report



Company:	Breitburn Operating	Local Co-ordinate Reference:	Well Encore M State #22
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	Well @ 3381.00usft (Nabors M10)
Site:	Encore M State #22	MD Reference:	Well @ 3381.00usft (Nabors M10)
Well:	Encore M State #22	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
819.00	1.08	284.62	818.91	3.28	-11.63	9.99	0.15	0.15	0.29	
914.00	1.01	284.71	913.89	3.72	-13.31	11.41	0.07	-0.07	0.09	
1,010.00	0.96	286.53	1,009.88	4.16	-14.89	12.77	0.06	-0.05	1.90	
1,105.00	1.15	287.67	1,104.86	4.68	-16.57	14.24	0.20	0.20	1.20	
1,200.00	0.88	296.17	1,199.85	5.29	-18.13	15.72	0.32	-0.28	8.95	
1,263.00	0.90	285.00	1,262.84	5.63	-19.04	16.56	0.28	0.03	-17.73	
1,451.00	0.90	283.90	1,450.82	6.37	-21.90	18.97	0.01	0.00	-0.59	
1,640.00	0.90	279.20	1,639.79	6.96	-24.81	21.29	0.04	0.00	-2.49	
1,828.00	0.70	306.10	1,827.77	7.88	-27.19	23.53	0.22	-0.11	14.31	
2,016.00	1.00	317.60	2,015.75	9.76	-29.23	26.28	0.18	0.16	6.12	
2,204.00	0.70	334.70	2,203.73	12.01	-30.82	29.03	0.21	-0.16	9.10	
2,392.00	0.80	4.80	2,391.72	14.36	-31.20	31.07	0.21	0.05	16.01	
2,580.00	1.00	359.90	2,579.69	17.31	-31.10	33.26	0.11	0.11	-2.61	
2,768.00	0.80	358.20	2,767.67	20.26	-31.14	35.55	0.11	-0.11	-0.90	
2,957.00	0.90	358.10	2,956.65	23.06	-31.23	37.75	0.05	0.05	-0.05	
3,145.00	0.90	345.80	3,144.63	25.97	-31.64	40.24	0.10	0.00	-6.54	
3,333.00	1.00	342.30	3,332.60	28.96	-32.50	43.09	0.06	0.05	-1.86	
3,521.00	1.00	335.00	3,520.57	32.01	-33.70	46.19	0.07	0.00	-3.88	
3,710.00	0.80	335.70	3,709.55	34.71	-34.94	49.05	0.11	-0.11	0.37	
3,898.00	0.80	334.00	3,897.53	37.09	-36.05	51.59	0.01	0.00	-0.90	
4,086.00	0.70	349.50	4,085.51	39.40	-36.84	53.86	0.12	-0.05	8.24	
4,274.00	0.70	352.40	4,273.50	41.66	-37.20	55.83	0.02	0.00	1.54	
4,462.00	0.80	352.80	4,461.48	44.10	-37.51	57.90	0.05	0.05	0.21	
4,648.00	0.70	327.90	4,647.47	46.35	-38.28	60.11	0.18	-0.05	-13.39	
4,836.00	0.70	339.50	4,835.46	48.40	-39.29	62.33	0.08	0.00	6.17	
5,025.00	1.00	341.50	5,024.43	51.05	-40.22	64.96	0.16	0.16	1.06	
5,213.00	1.20	331.60	5,212.40	54.34	-41.68	68.41	0.15	0.11	-5.27	
5,402.00	1.00	328.40	5,401.36	57.48	-43.48	71.98	0.11	-0.11	-1.69	
5,590.00	1.10	341.00	5,589.33	60.58	-44.93	75.29	0.13	0.05	6.70	
5,779.00	1.40	328.50	5,778.29	64.27	-46.73	79.26	0.21	0.16	-6.61	
5,967.00	0.70	255.20	5,966.26	65.93	-49.04	82.02	0.73	-0.37	-38.99	
6,155.00	0.80	261.60	6,154.25	65.45	-51.45	83.20	0.07	0.05	3.40	
6,343.00	0.50	255.80	6,342.23	65.06	-53.54	84.25	0.16	-0.16	-3.09	
6,365.00	0.70	241.70	6,364.23	64.97	-53.75	84.32	1.12	0.91	-64.09	
6,420.00	0.70	241.70	6,419.23	64.65	-54.34	84.46	0.00	0.00	0.00	
Projection to TD-6420.00' MD										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
6,420.00	6,419.23	64.65	-54.34	Projection to TD-6420.00' MD	



MS Directional
Survey Report



Company:	Breitburn Operating	Local Co-ordinate Reference:	Well Encore M State #22
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	Well @ 3381.00usft (Nabors M10)
Site:	Encore M State #22	MD Reference:	Well @ 3381.00usft (Nabors M10)
Well:	Encore M State #22	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Daily Report Saturday, November 3, 2018
(1 of 10)



Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breltburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$9,000.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cummulative Cost: \$9,000.00	Night MWD: N/A

Drilling Summary				Drilling Parameters					
Start Depth: 1,220	End Depth: 1,220	Below Rotary Hours: 0.00	Circulating Hours: 0.00		Min	Max		Min	Max
Total Footage: 0.00	Total Drilled Hours: 0.00	Avg. Total ROP: 0.00	Percent Drilled: 0.00%	WOB:	N/A	N/A	SPP Off Bottom:	N/A	N/A
Rotating Footage: 0.00	Rotary Hours: 0.00	Avg. Rotary ROP: 0.00	Percent Rotary: 0.00%	Pick Up:	N/A	N/A	SPP On Bottom:	N/A	N/A
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%	Slack Off:	N/A	N/A	Delta Pressure:	N/A	N/A
				Rot. Off Bottom:	N/A	N/A	Flow Rate:	N/A	N/A
				Bottom Hole Temp.:	N/A	N/A	SPM:	N/A	N/A

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 1,200	Incl. In: 0.88	Azm. In: 296.17	MD Out: 1,200	Incl. Out: 0.88	Azm. Out: 296.17
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BHA's	General Comments Stand-by for casing and cement operations
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24 Hours Summary Stand-by for casing and cement operations	Next 24 Hours Plan Stand-by for casing and cement operations
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Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Stand-by	00:00	24:00	24.00	1,220	1,220	Stand-by for casing and cement operations

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Daily Report Sunday, November 4, 2018
(2 of 10)



Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Bretburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$3,000.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cummulative Cost: \$12,000.00	Night MWD: N/A

Drilling Summary

Start Depth: 1,220	End Depth: 1,220	Below Rotary Hours: 0.00	Circulating Hours: 0.00
Total Footage: 0.00	Total Drilled Hours: 0.00	Avg. Total ROP: 0.00	Percent Drilled: 0.00%
Rotating Footage: 0.00	Rotary Hours: 0.00	Avg. Rotary ROP: 0.00	Percent Rotary: 0.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	N/A	N/A	SPP Off Bottom:	N/A	N/A
Pick Up:	N/A	N/A	SPP On Bottom:	N/A	N/A
Slack Off:	N/A	N/A	Delta Pressure:	N/A	N/A
Rot. Off Bottom:	N/A	N/A	Flow Rate:	N/A	N/A
Bottom Hole Temp.:	N/A	N/A	SPM:	N/A	N/A

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 1,200	Incl. In: 0.88	Azm. In: 296.17	MD Out: 1,200	Incl. Out: 0.88	Azm. Out: 296.17
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BHA's

General Comments

Stand-by for casing and cement operations

24 Hours Summary

Stand-by for casing and cement operations

Next 24 Hours Plan

Stand-by for casing and cement operations, Nipple up BOP's, Test, Pick up directional tools

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Stand-by	00:00	24:00	24.00	1,220	1,220	Stand-by for casing and cement operations

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Daily Report Monday, November 5, 2018

(3 of 10)



Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$13,618.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cumulative Cost: \$25,618.00	Night MWD: N/A

Drilling Summary

Start Depth: 1,220	End Depth: 1,220	Below Rotary Hours: 0.00	Circulating Hours: 0.00
Total Footage: 0.00	Total Drilled Hours: 0.00	Avg. Total ROP: 0.00	Percent Drilled: 0.00%
Rotating Footage: 0.00	Rotary Hours: 0.00	Avg. Rotary ROP: 0.00	Percent Rotary: 0.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	N/A	N/A	SPP Off Bottom:	N/A	N/A
Pick Up:	N/A	N/A	SPP On Bottom:	N/A	N/A
Slack Off:	N/A	N/A	Delta Pressure:	N/A	N/A
Rot. Off Bottom:	N/A	N/A	Flow Rate:	N/A	N/A
Bottom Hole Temp.:	N/A	N/A	SPM:	N/A	N/A

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 1,200	Incl. In: 0.88	Azm. In: 296.17	MD Out: 1,200	Incl. Out: 0.88	Azm. Out: 296.17
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BHA's

12 1/4" Bit , 7 3/4" 7 3/4, 4/5, 5.3 Motor , 8 5/16" Stabilizer , 8 1/16" Other , 8 1/16" #1 Drill Collar , 8" Muleshoe , 7 15/16" Drill Collar , 8 1/16" Stabilizer , 6 3/4" X-Over , 6 1/2" Drill Collar , 6 1/4" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,

General Comments

Daily Report: 11/5/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico Drillers on Location: John Hornsby / Jarrod Hollier Current Activity: Pick up Bha # 1 Prev. 24 hr.: Stand-by for Casing and cement operations: Nipple up and testing Bop's Daily Cost: \$ 6,900 Cum. Cost: \$ 18,900 Estimated Finish Date: 11-12-18 Projected TD Depth: 7,600' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 1,220' Feet Left to Drill: 6,400' Depth at Last Survey: 1,200' (Gyro Tie-In) Current Inc.: 0.88° Current Azm.: 296.17° Current Temp.: N/A Above / Below: 5.29' North Left / Right: 18.13' West Motor Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 4,500' LGS: % N/A Motors on Location: In Hole: 96D335D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° Clean On Rack: 96D334D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° Dirty on Rack: None Motors & Tools Needed: None

24 Hours Summary

Nipple up, Testing Bops

Next 24 Hours Plan

Pick up directional tools , Tih, Drill shoe track, Drill vertical intermediate hole section

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
05/Nov/2018	00:00	Fresh Water	0	0	0	0	0	0	0	0	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Stand-by	00:00	23:30	23.50	1,220	1,220	Nipple up and test Bops
Assembling BHA	23:30	24:00	0.50	1,220	1,220	Assembling BHA

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$6,900.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cumulative Cost: \$32,518.00	Night MWD: N/A

Drilling Summary

Start Depth: 1,220	End Depth: 2,040	Below Rotary Hours: 23.75	Circulating Hours: 12.67
Total Footage: 820.00	Total Drilled Hours: 7.65	Avg. Total ROP: 107.19	Percent Drilled: 31.88%
Rotating Footage: 820.00	Rotary Hours: 7.65	Avg. Rotary ROP: 107.19	Percent Rotary: 100.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	8	25	SPP Off Bottom:	450	1575
Pick Up:	85	100	SPP On Bottom:	800	2100
Slack Off:	85	100	Delta Pressure:	150	550
Rot. Off Bottom:	85	100	Flow Rate:	350	710
Bottom Hole Temp.:	0	90	SPM:	84	170

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 1,200	Incl. In: 0.88	Azm. In: 296.17	MD Out: 2,016	Incl. Out: 1.00	Azm. Out: 317.60
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BHA's

12 1/4" Bit, 7 3/4" 7 3/4, 4/5, 5.3 Motor, 8 5/16" Stabilizer, 8 1/16" Other, 8 1/16" #1 Drill Collar, 8" Muleshoe, 7 15/16" Drill Collar, 8 1/16" Stabilizer, 6 3/4" X-Over, 6 1/2" Drill Collar, 6 1/4" Jars, 6 1/2" Drill Collar, 6 13/16" X-Over,

General Comments

Daily Report: 11/6/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico
Location: John Hornsby / Jarrod Hollier Current Activity: Drilling intermediate utilizing MSE procedures Prev. 24 hr.: Pick up Directional bha # 1 & Tih, Drill Cement and shoe track, F.I.T. Test, Displaced hole with 10.0 ppg brine water, Drilling ahead in vertical hole utilizing MSE. Daily Cost: \$ 6,900 Cum. Cost: \$ 32,518 Estimated Finish Date: 11-12-18 Projected TD Depth: 7,400' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 1,220' Feet Left to Drill: 6,180' Depth at Last Survey: 1,200' (Gyro Tie-In) Current Inc.: 0.7° Current Azm.: 306.10° Current Temp.: 88° Above / Below: 7.87' North Left / Right: 27.19' West Motor Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 4,500' LGS: % N/A Motors on Location: In Hole: 96D335D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° D&C Hrs 12 Clean On Rack: 96D334D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° Dirty on Rack: None

24 Hours Summary

Pick up Directional bha # 1 & Tih, Drilling Cement and shoe track to 1,193' Collar @ 1,174', Choke Test, Unclog gas buster, Drilled rest of shoe track, Shoe @ 1,218', Drilled 10' of new formation, F.I.T. Test, Displaced hole with 10.0 ppg brine water, Drilling ahead in vertical hole utilizing MSE.

Next 24 Hours Plan

Continue to drill ahead in vertical hole only sliding if Inc. reaches 2°

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
06/Nov/2018	00:00	Brine	0	0	0	0	0	0	0	0	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Other	00:00	02:15	2.25	1,220	1,220	Assembling BHA # 1
MWDRun	02:15	02:30	0.25	1,220	1,220	Testing Mwd & Motor
TIH	02:30	05:30	3.00	1,220	1,220	TIH - Tag 1164'
Other	05:30	07:00	1.50	1,220	1,220	Fixing transfer hose for displacing (Unable to fix)
Drilling Cement	07:00	07:35	0.60	1,220	1,220	Drilling Cement and shoe track to 1,193' Collar @ 1,174'
Other	07:35	10:10	2.58	1,220	1,220	Choke Test, Unclog Gas Buster
Drilling Cement	10:10	10:50	0.67	1,220	1,220	Drilled rest of shoe track, Shoe @ 1,218'
Rotating	10:50	11:00	0.15	1,220	1,230	(WOB=8;GPM=350;RPM=30;DP=150)
Other	11:00	11:45	0.75	1,230	1,230	F.I.T. Test
Circulating	11:45	15:30	3.75	1,230	1,230	Displace hole with 10.0 ppg Brine
Other	15:30	16:30	1.00	1,230	1,230	Putting cuttings box in place, Install rotating head
Rotating	16:30	18:00	1.50	1,230	1,341	(WOB=15;GPM=350;RPM=30;DP=150)
Rotating	18:00	21:15	3.25	1,341	1,623	(WOB=18;GPM=418;RPM=60;DP=375)
Rotating	21:15	22:00	0.75	1,623	1,717	(WOB=20;GPM=627;RPM=70;DP=460)
Rotating	22:00	23:10	1.17	1,717	1,906	(WOB=25;GPM=710;RPM=70;DP=550)
Rotating	23:10	24:00	0.83	1,906	2,040	(WOB=20;GPM=710;RPM=70;DP=525)

Daily Report Wednesday, November 7, 2018

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$6,900.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cumulative Cost: \$39,418.00	Night MWD: N/A

Drilling Summary

Start Depth: 2,040	End Depth: 3,806	Below Rotary Hours: 24.03	Circulating Hours: 22.03
Total Footage: 1,766.00	Total Drilled Hours: 22.03	Avg. Total ROP: 80.15	Percent Drilled: 91.68%
Rotating Footage: 1,766.00	Rotary Hours: 22.03	Avg. Rotary ROP: 80.15	Percent Rotary: 100.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	15	28	SPP Off Bottom:	1650	2000
Pick Up:	100	140	SPP On Bottom:	2150	2475
Slack Off:	100	130	Delta Pressure:	350	675
Rot. Off Bottom:	100	135	Flow Rate:	670	752
Bottom Hole Temp.:	85.7	105.5	SPM:	160	180

Last Casing	Top:	Shoe:	ID: 0	OD: 0
Surveys	MD In: 2,016	Incl. In: 1.00	Azm. In: 317.60	MD Out: 3,710
				Incl. Out: 0.80
				Azm. Out: 335.70

BHA's

12 1/4" Bit , 7 3/4" 7 3/4, 4/5, 5.3 Motor , 8 5/16" Stabilizer , 8 1/16" Other , 8 1/16"
#1 Drill Collar , 8" Muleshoe , 7 15/16" Drill Collar , 8 1/16" Stabilizer , 6 3/4" X-Over , 6 1/2" Drill Collar , 6 1/4" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,

General Comments

Daily Report: 11/7/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico
Drillers on Location: John Hornsby / Jarrod Hollier Current Activity: Drilling intermediate utilizing MSE procedures Prev. 24 hr.: Drilling intermediate utilizing MSE procedures Daily Cost: \$ 6,900 Cum. Cost: \$ 39,418 Estimated Finish Date: 11-12-18 Projected TD Depth: 6,400'
Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 3,806' Feet Left to Drill: 2,594' Depth at Last Survey: 3,710' Current Inc.: 0.8° Current Azm.: 335.7° Current Temp.: 109.6° Above / Below: 34.71' North Left / Right: 34.94' West Motor Yield: N/A
DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 4,500'
LGS: % N/A Motors on Location: In Hole: 96D335D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50°
D&C Hrs 33 Clean On Rack: 96D334D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° Dirty on Rack: None Motors & Tools Needed: None

24 Hours Summary

Drilling vertical intermediate section with MSE procedures

Next 24 Hours Plan

Drilling vertical intermediate section with MSE procedures

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
07/Nov/2018	13:30	Brine	10.05	30	1	1	55	88.4	0	0.38	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Rotating	00:00	01:30	1.50	2,040	2,265	(WOB=20;GPM=752;RPM=70;DP=475)
Rotating	01:30	03:15	1.75	2,265	2,455	(WOB=15;GPM=752;RPM=55;DP=350)
Rotating	03:15	03:50	0.60	2,455	2,505	(WOB=20;GPM=752;RPM=55;DP=450)
Rotating	03:50	05:10	1.33	2,505	2,640	(WOB=28;GPM=752;RPM=60;DP=675)
Rotating	05:10	08:00	2.85	2,640	2,860	(WOB=28;GPM=752;RPM=60;DP=500)
Rotating	08:00	11:30	3.50	2,860	3,129	(WOB=28;GPM=670;RPM=60;DP=500)
Rotating	11:30	14:45	3.25	3,129	3,400	(WOB=28;GPM=670;RPM=60;DP=400)
Rotating	14:45	16:00	1.25	3,400	3,500	(WOB=28;GPM=670;RPM=60;DP=400)
Rotating	16:00	17:30	1.50	3,500	3,598	(WOB=28;GPM=752;RPM=60;DP=400)
Rig repair	17:30	19:00	1.50	3,598	3,598	Rig repair
Rotating	19:00	20:00	1.00	3,598	3,635	(WOB=28;GPM=752;RPM=60;DP=475)
Rotating	20:00	21:00	1.00	3,635	3,675	(WOB=27;GPM=752;RPM=50;DP=475)
Other	21:00	21:30	0.50	3,675	3,675	Flow Check / Shut In ck casing pressure
Rotating	21:30	22:00	0.50	3,675	3,691	(WOB=28;GPM=712;RPM=40;DP=475)
Rotating	22:00	24:00	2.00	3,691	3,806	(WOB=25;GPM=712;RPM=50;DP=475)

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Holler
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$6,900.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cummulative Cost: \$46,318.00	Night MWD: N/A

Drilling Summary

Start Depth: 3,806	End Depth: 4,557	Below Rotary Hours: 18.50	Circulating Hours: 14.00
Total Footage: 751.00	Total Drilled Hours: 12.00	Avg. Total ROP: 62.58	Percent Drilled: 50.00%
Rotating Footage: 751.00	Rotary Hours: 12.00	Avg. Rotary ROP: 62.58	Percent Rotary: 100.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	20	25	SPP Off Bottom:	1600	1800
Pick Up:	140	150	SPP On Bottom:	2000	2300
Slack Off:	130	135	Delta Pressure:	400	500
Rot. Off Bottom:	135	145	Flow Rate:	630	712
Bottom Hole Temp.:	105.5	113.6	SPM:	150	170

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 3,710	Incl. In: 0.80	Azm. In: 335.70	MD Out: 4,479	Incl. Out: 0.90	Azm. Out: 353.30
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BHA's

12 1/4" Bit , 7 3/4" 7 3/4, 4/5, 5.3 Motor , 8 5/16" Stabilizer , 8 1/16" Other , 8 1/16" #1 Drill Collar , 8" Muleshoe , 7 15/16" Drill Collar , 8 1/16" Stabilizer , 6 3/4" X-Over , 6 1/2" Drill Collar , 6 1/4" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,

General Comments

Daily Report: 11/8/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico
Location: John Hornsby / Jarrod Holler Current Activity: Stand-by for casing operations
Prev. 24 hr.: Drilling intermediate utilizing MSE procedures to 4557' Daily Cost: \$ 6,900
Cum. Cost: \$ 46,318 Estimated Finish Date: 11-12-18 Projected TD Depth: 6,400'
Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 4,557' Feet Left to Drill: 1,843' Depth at Last Survey: 4,479' Current Inc.: 0.9° Current Azm.: 353.30° Current Temp.: 113.6° Above / Below: 43.13' North Left / Right: 27.69' West Motor Yield: N/A
DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 4,557'
LGS: % 0.38 Motors on Location: In Hole: Clean On Rack: 67D16682SB 6 7/8 6.4 FXD @ 1.5° 67D16769SB 6 7/8 6.4 FXD A 1.5° Dirty on Rack: None Shipped IN 96D335D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° D&C Hrs 46 96D334D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50°
Motors & Tools Needed: None

24 Hours Summary

Drilling vertical intermediate section with MSE procedures and reached casing point for this section at 4,557', Circulated prior to pooh, Pooh and laid down directional tools, Went on stand-by for casing and cement operations.

Next 24 Hours Plan

Stand-by for casing and cement operations

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
08/Nov/2018	00:00	Brine	10.05	30	1	1	55	88.4	0	3.47	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Rotating	00:00	01:30	1.50	3,806	3,900	(WOB=25;GPM=712;RPM=50;DP=500)
Rotating	01:30	12:00	10.50	3,900	4,557	(WOB=20;GPM=630;RPM=50;DP=400)
MWD Survey	12:00	12:05	0.10	4,557	4,557	Survey on bottom prior to pooh
Circulating	12:05	14:00	1.90	4,557	4,557	Circulating
POOH	14:00	18:30	4.50	4,557	4,557	POOH
Break Down BHA	18:30	20:30	2.00	4,557	4,557	Lay down bha # 1
Stand-by	20:30	24:00	3.50	4,557	4,557	Stand-by for casing operations

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Daily Report Friday, November 9, 2018

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Holler
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$3,000.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cummulative Cost: \$49,318.00	Night MWD: N/A

Drilling Summary

Start Depth: 4,557	End Depth: 4,557	Below Rotary Hours: 0.00	Circulating Hours: 0.00
Total Footage: 0.00	Total Drilled Hours: 0.00	Avg. Total ROP: 0.00	Percent Drilled: 0.00%
Rotating Footage: 0.00	Rotary Hours: 0.00	Avg. Rotary ROP: 0.00	Percent Rotary: 0.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	N/A	N/A	SPP Off Bottom:	N/A	N/A
Pick Up:	N/A	N/A	SPP On Bottom:	N/A	N/A
Slack Off:	N/A	N/A	Delta Pressure:	N/A	N/A
Rot. Off Bottom:	N/A	N/A	Flow Rate:	N/A	N/A
Bottom Hole Temp.:	N/A	N/A	SPM:	N/A	N/A

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 4,479	Incl. In: 0.90	Azm. In: 353.30	MD Out: 4,479	Incl. Out: 0.90	Azm. Out: 353.30
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BHA's

12 1/4" Bit , 7 3/4" 7 3/4, 4/5, 5.3 Motor , 8 5/16" Stabilizer , 8 1/16" Other , 8 1/16" #1 Drill Collar , 8" Muleshoe , 7 15/16" Drill Collar , 8 1/16" Stabilizer , 6 3/4" X-Over , 6 1/2" Drill Collar , 6 1/4" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,

General Comments

Daily Report: 11/09/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico
Location: John Hornsby / Jarrod Holler Current Activity: Stand-by for casing/cementing operations Prev. 24 hr.: Stand-by for casing/cementing operations Daily Cost: \$ 3,000 Cum. Cost: \$ 49,318 Estimated Finish Date: 11-12-18 Projected TD Depth: 6,400' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 4,557' Feet Left to Drill: 1,843' Depth at Last Survey: 4,479' Current Inc.: 0.9° Current Azm.: 353.30° Current Temp.: 113.6° Above / Below: 44' North Left / Right: 37' West Motor Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 7,600' LGS: % 0.38 Motors on Location: In Hole: None Clean On Rack: 67D16682SB 6 7/8 6.4 FXD @ 1.5° 67D16769SB 6 7/8 6.4 FXD A 1.5° Dirty on Rack: None Shipped IN 96D335D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50° D&C Hrs 46 96D334D 9 5/8 Hybrid 4/5 5.3, ABH @ 1.50°

24 Hours Summary

Stand-by for casing and cementing operations

Next 24 Hours Plan

Pick up Bha # 2, Drill shoe track, c/o with fresh water. Drill Production hole section with MSE

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
09/Nov/2018	00:00	Brine	10.05	30	1	1	55	0	0	0.38	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Stand-by	00:00	24:00	24.00	4,557	4,557	Stand-by

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Daily Report Saturday, November 10, 2018

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitbart Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$18,942.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cumulative Cost: \$68,260.00	Night MWD: N/A

Drilling Summary

Start Depth: 4,557	End Depth: 4,815	Below Rotary Hours: 19.42	Circulating Hours: 8.43
Total Footage: 258.00	Total Drilled Hours: 4.27	Avg. Total ROP: 60.47	Percent Drilled: 17.77%
Rotating Footage: 258.00	Rotary Hours: 4.27	Avg. Rotary ROP: 60.47	Percent Rotary: 100.00%
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%

Drilling Parameters

	Min	Max		Min	Max
WOB:	5	20	SPP Off Bottom:	825	1475
Pick Up:	150	150	SPP On Bottom:	950	1875
Slack Off:	135	135	Delta Pressure:	125	400
Rot. Off Bottom:	145	145	Flow Rate:	351	500
Bottom Hole Temp.:	113.6	113.6	SPM:	84	150

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 4,479	Incl. In: 0.90	Azm. In: 353.30	MD Out: 4,648	Incl. Out: 0.70	Azm. Out: 327.90
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BHA's

12 1/4" Bit , 7 3/4" 7 3/4, 4/5, 5.3 Motor , 8 5/16" Stabilizer , 8 1/16" Other , 8 1/16"
#1 Drill Collar , 8" Muleshoe , 7 15/16" Drill Collar , 8 1/16" Stabilizer , 6 3/4" X-Over , 6
 1/2" Drill Collar , 6 1/4" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,
 8 3/4" Bit , 6 11/16" Impact 6 3/4, 7/8, 6.4 Fxd @ 1.50" W/ 8 1/4" NBS Motor , 6 1/2"
#2 Stabilizer , 6 1/2" Muleshoe , 6 9/16" Drill Collar , 6 13/16" Stabilizer , 6 11/16" X-
 Over , 6 1/2" Drill Collar , 6 3/8" Jars , 6 1/2" Drill Collar , 6 13/16" X-Over ,

General Comments

Daily Report: 11/10/18 MSMO-56997 Breitbart Operating Encore M State #22 Nabors M10
 Lea County, New Mexico Drillers on
 Location: John Hornsby / Jarrod Hollier Current Activity: Drilling vertical production hole
 section while using Mse procedures Prev. 24 hr.: Stand-by for casing/cementing operations
 Daily Cost: \$ 18,392 Cum. Cost: \$ 68,260 Estimated Finish Date: 11-12-18 Projected TD
 Depth: 6,400' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 4,815'
 Feet Left to Drill: 1,585' Depth at Last Survey: 4,648' Current Inc.: 0.7° Current Azm.:
 327.9° Current Temp.: 95° Above / Below: 46.35' North Left / Right: 38.28' West Motor
 Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing
 Depth: 7,600' LGS: % 0.38 Motors on Location: In Hole: 67D16769SB 6 3/4 7/8 6.4 FXD A
 1.5° D&C Hrs = 8 Clean On Rack: 67D16682SB 6 3/4 7/8 6.4 FXD @ 1.5° 67D16738SB 7/8
 6.4 Straight MTR

24 Hours Summary

Standby for cement operations. Pick up Bha# 2 and rack bha in derrick while waiting on rig
 equipment for well head, Finished picking up BHA #2, TIH to 3,973, Drilled out DV Tool @
 3,018'. Resumed TIH to 4,455', Casing test and displaced hole with fresh water, Drilling
 Cement and shoe track to 4,547', Tagged at 4,455', Collar at 4,467'

Next 24 Hours Plan

Drill vertical production hole section with Mse.

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
10/Nov/2018	00:00	Brine	10.05	0	0	0	0	0	0	0	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Stand-by	00:00	03:00	3.00	4,557	4,557	Stand-by
Assembling BHA	03:00	04:30	1.50	4,557	4,557	Assembling BHA #2, Rack Bha in derrick
Other	04:30	08:30	4.00	4,557	4,557	Change out seals in well head
MWDRUN	08:30	08:35	0.10	4,557	4,557	Test MWD Tool
Other	08:35	09:30	0.90	4,557	4,557	Finished picking up BHA #2
TIH	09:30	11:45	2.25	4,557	4,557	TIH to 3,973'
Other	11:45	12:30	0.75	4,557	4,557	Casing Test
Circulating	12:30	13:00	0.50	4,557	4,557	Drilled out DV Tool @ 3,018'
TIH	13:00	13:45	0.75	4,557	4,557	TIH to 4,455'
Circulating	13:45	16:00	2.25	4,557	4,557	Casing Test and displace hole with fresh water
Drilling Cement	16:00	16:30	0.50	4,557	4,557	Drilling Cement and shoe track to 4,501', Tagged at 4,455', Collar at 4,467'
Other	16:30	18:15	1.75	4,557	4,557	Shut down waiting on vacuum truck to suck fluids out of pits.
Drilling Cement	18:15	18:40	0.42	4,557	4,557	Drilling Cement and shoe track to 4,501' / 4,555'
Rotating	18:40	18:45	0.08	4,557	4,567	(WOB=5;GPM=351;RPM=30;DP=125)
Circulating	18:45	19:15	0.50	4,567	4,567	Circulating
Other	19:15	19:49	0.58	4,567	4,567	FIT
Rotating	19:49	21:00	1.18	4,567	4,607	(WOB=5;GPM=351;RPM=30;DP=125)
Rotating	21:00	21:30	0.50	4,607	4,639	(WOB=15;GPM=418;RPM=40;DP=300)
Rotating	21:30	24:00	2.50	4,639	4,815	(WOB=20;GPM=500;RPM=70;DP=400)

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Daily Report Sunday, November 11, 2018

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Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitburn Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$6,900.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cumulative Cost: \$75,160.00	Night MWD: N/A

Drilling Summary

Start Depth: 4,815	End Depth: 6,420	Below Rotary Hours: 24.00	Circulating Hours: 24.00
Total Footage: 1,605.00	Total Drilled Hours: 19.00	Avg. Total ROP: 84.47	Percent Drilled: 79.17%
Rotating Footage: 1,590.00	Rotary Hours: 18.85	Avg. Rotary ROP: 84.35	Percent Rotary: 99.07%
Sliding Footage: 15.00	Sliding Hours: 0.15	Avg. Sliding ROP: 100.00	Percent Sliding: 0.93%

Drilling Parameters

	Min	Max		Min	Max
WOB:	22	25	SPP Off Bottom:	1475	1750
Pick Up:	160	175	SPP On Bottom:	1875	2200
Slack Off:	150	155	Delta Pressure:	300	450
Rot. Off Bottom:	155	165	Flow Rate:	500	550
Bottom Hole Temp.:	100.1	109.6	SPM:	120	132

Last Casing	Top:	Shoe:	ID: 0	OD: 0
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Surveys	MD In: 4,648	Incl. In: 0.70	Azm. In: 327.90	MD Out: 6,365	Incl. Out: 0.70	Azm. Out: 241.70
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BHA's

8 3/4" Bit, 6 11/16" Mpack 6 3/4, 7/8, 6.4 Fxd @ 1.50" W/ 8 1/4" NBS Motor, 6 1/2" #2 Stabilizer, 6 1/2" Muleshoe, 6 9/16" Drill Collar, 6 13/16" Stabilizer, 6 11/16" X-Over, 6 1/2" Drill Collar, 6 3/8" Jars, 6 1/2" Drill Collar, 6 13/16" X-Over

General Comments

Daily Report: 11/11/18 MSMO-56997 Breitburn Operating Encore M State #22 Nabors M10 Lea County, New Mexico
Drillers on Location: John Hornsby / Jarrod Hollier Current Activity: Circulating at 6420' Prev. 24 hr: Drilling vertical production hole section while using MSE procedures Daily Cost: \$ 6,900 Cum. Cost: \$ 75,160 Estimated Finish Date: 11-12-18 Projected TD Depth: 6,400' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 6,420' Feet Left to Drill: 0' Depth at Last Survey: 6365' Current Inc.: .7" Current Azm.: 241.7° Current Temp.: 100.1° Above / Below: 64.97' North Left / Right: 53.75' West Motor Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 7,600' LGS: % 0.38 Motors on Location: In Hole: 67D16769SB 6 3/4 7/8 6.4 FXD A 1.5° D&C Hrs = 30 Clean On Rack: 67D16682SB 6 3/4 7/8 6.4 FXD @ 1.5° 67D16738SB 7/8 6.4 Straight MTR Dirty on Rack: None Motors & Tools Needed: None

24 Hours Summary

Drill vertical production hole section with Mse, T.D. This section @ 6,420', Circulate and condition mud prior to pooh to lay down directional tools

Next 24 Hours Plan

Pooh and lay out directional tools. Load all tools on truck to ship back.

Mud Checks

Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
11/Nov/2018	00:00	Fresh Water	8.6	0	0	0	0	0	0	0	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Rotating	00:00	03:00	3.00	4,815	5,075	(WOB=25;GPM=500;RPM=70;DP=400)
Rotating	03:00	07:00	4.00	5,075	5,480	(WOB=25;GPM=500;RPM=70;DP=400)
Rotating	07:00	11:20	4.35	5,480	5,837	(WOB=25;GPM=550;RPM=50;DP=450)
Sliding	11:20	11:30	0.15	5,837	5,852	(WOB=22;GPM=550;TFO=M 150;DP=300)
Rotating	11:30	14:15	2.75	5,852	6,075	(WOB=25;GPM=550;RPM=60;DP=350)
Rotating	14:15	16:30	2.25	6,075	6,230	(WOB=25;GPM=550;RPM=50;DP=350)
Rotating	16:30	19:00	2.50	6,230	6,420	(WOB=25;GPM=550;RPM=50;DP=350)
Circulating	19:00	24:00	5.00	6,420	6,420	Circulating

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Daily Report Monday, November 12, 2018

(10 of 10)



Job Number: MSMO-56997	State: New Mexico	Company Man: N/A	Lead Directional: John Hornsby (SDS)
Customer: Breitbart Operating LP	County/Parish: Lea	Coordinator: John McKay	Night Directional: Jarrod Hollier
Well Name: Encore M State #22	Field: Wolfcamp Shale	Daily Cost: \$6,900.00	Lead MWD: N/A
Rig Name: Nabors M10	API #: N/A	Cummulative Cost: \$82,060.00	Night MWD: N/A

Drilling Summary				Drilling Parameters					
Start Depth: 6,420	End Depth: 6,420	Below Rotary Hours: 22.75	Circulating Hours: 1.00	Min	Max	Min	Max		
Total Footage: 0.00	Total Drilled Hours: 0.00	Avg. Total ROP: 0.00	Percent Drilled: 0.00%	WOB:	N/A	SPP Off Bottom:	N/A	N/A	
Rotating Footage: 0.00	Rotary Hours: 0.00	Avg. Rotary ROP: 0.00	Percent Rotary: 0.00%	Pick Up:	N/A	SPP On Bottom:	N/A	N/A	
Sliding Footage: 0.00	Sliding Hours: 0.00	Avg. Sliding ROP: 0.00	Percent Sliding: 0.00%	Slack Off:	N/A	Delta Pressure:	N/A	N/A	
				Rot. Off Bottom:	N/A	Flow Rate:	N/A	N/A	
				Bottom Hole Temp.:	N/A	SPM:	N/A	N/A	

Last Casing	Top:	Shoe:	ID: 0	OD: 0
Surveys	MD In: 6,365	Incl. In: 0.70	Azm. In: 241.70	MD Out: 6,365
				Incl. Out: 0.70
				Azm. Out: 241.70

BHA's	General Comments
8 3/4" Bit, 6 11/16" Impact 6 3/4, 7/8, 6.4 Fxd @ 1.50° W/ 8 1/4" NBS Motor, 6 1/2" #2 Stabilizer, 6 1/2" Muleshoe, 6 9/16" Drill Collar, 6 13/16" Stabilizer, 6 11/16" X-Over, 6 1/2" Drill Collar, 6 3/8" Jars, 6 1/2" Drill Collar, 6 13/16" X-Over,	Daily Report: 11/12/18 MSMO-56997 Breitbart Operating Encore M State #22 Nabors M10 Lea County, New Mexico Location: John Hornsby / Jarrod Hollier Current Activity: Lay down Directional bha to ship tools back to shop. Prev. 24 hr: Drilling vertical production hole section while using MSE procedures To 6420'. Circulate hole clean and pooh. Daily Cost: \$ 6,900 Cum. Cost: \$ 82,060 Estimated Finish Date: 11-12-18 Projected TD Depth: 6,400' Guidance Company: MSG Magnetic Declination: 6.69 Current Depth: 6,420' Feet Left to Drill: 0' Depth at Last Survey: 6365' Current Inc.: 7° Current Azm.: 241.7° Current Temp.: 100.1° Above / Below: 64.97' North Left / Right: 53.75' West Motor Yield: N/A DLNL: N/A Vert. Sect.: N/A Last Casing Depth: 1,200' Next Projected Casing Depth: 7,600' LGS: % 0.38 Motors on Location: In Hole: 67D16769SB 6 3/4 7/8 6.4 FXD A 1.5° D&C Hrs = 31 Clean On Rack: 67D16682SB 6 3/4 7/8 6.4 FXD @ 1.5° 67D16738SB 7/8 6.4 Straight MTR Dirty on Rack: None Motors & Tools Needed: None

24 Hours Summary	Next 24 Hours Plan
Circulate and condition mud. Pooh and lay out directional tools and ship all tools back to shop.	Job finished

Mud Checks											
Date	Time	Type	Weight	Viscosity	PV	YP	Temperature	% Water	% Oil	% LGS	Comments
12/Nov/2018	00:00	Fresh Water	8.6	0	0	0	0	0	0	0	N/A

Activity Code	Start Time	End Time	Hours	Start Depth	End Depth	Comments
Circulating	00:00	01:00	1.00	6,420	6,420	Circulating
POOH	01:00	06:45	5.75	6,420	6,420	POOH
Break Down BHA	06:45	08:00	1.25	6,420	6,420	Break Down BHA
Other	08:00	24:00	16.00	6,420	6,420	Load out all directional tools, Close out job

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MSMO-56997: BHA #1 Performance Report



Customer:	Well Name:	Rig Name:
Breitbart Operating LP	Encore M State #22	Nabors M10
County/Parish: Lea	Target Formation: N/A	Company Man: N/A
Field: Wolfcamp Shale	BHA Type: Stabilized Assembly	Lead Directional: John Hornsby (SDS)

BHA Performance Summary

Start Date: 05/Nov/2018 - 23:30	Start Depth: 1,220	Slide Footage: 0	Rotate Footage: 3,337
End Date: 10/Nov/2018 - 03:00	End Depth: 4,557	Slide Hours: 0.00	Rotate Hours: 41.68
Total Time: 99.53	Total Footage: 3,337	Slide %: 0.00%	Rotate %: 100.00%
Below RKB Hours: 66.28	Avg. Total ROP: 80.06	Avg. Slide ROP: 0.00	Avg. Rotate ROP: 80.06
Circ. Only Hours: 5.65	Reason to POOH: Reached casing point for this section @ 4,557'		

Drilling Parameters	Min	Max		Min	Max		Min	Max
SPP Off Bottom:	450	2000	WOB:	8	28	Flow Rate:	350	752
SPP On Bottom:	600	2475	Pick Up:	85	150	SPM:	84	180
Rot Off Bottom:	85	145	Slack Off:	85	135	Diff Pressure:	150	675

Motor Specs

Size:	Lobes:	Stages:	Bend°:	RPG:	Pad OD:	Bit to Bend:	NB Stab:	Max. Diff:	Rotor Jet:
7 3/4	4/5	5.30	1.50	0.25	9 7/8	7.11	11.75	1,195.00	N/A

Mud Data

Type: Brine, Fresh Water - BHT°: N/A											
Vis:	Min	Max	PV:	Min	Max	MW:	Min	Max	% LGS:	Min	Max
0	0	30	0	0	1	0	0	10.05	0	3.47	0
T°:	0	0	YP:	0	1	WL:	0	88.4	Solids:	0	11.6
									Gas:	0	0
									pH:	0	9

Pumps MFG

Model	Type	Liner	GPS	Efficiency %
1 HH HHF1600	Triplex	0	0	95 %
2 HH HHF1600	Triplex	0	0	95 %

Bit Data

Manufacturer: N/A	Model: N/A	Type: N/A
TFA: 1.74	Pressure Drop: 146.41	IADC#: N/A

Sensor Offsets

MWD: 78.00	Sonic: N/A	Gamma: N/A	DNSS: N/A	Resist: N/A	Type: Conventional
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Bit IADC Code

IR: 0	OR: 0	Dull: N/A	Loc: N/A	BS: N/A	G: N/A	ODL: N/A
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Surveys

Incl. In: 0.88	Azm. In: 296.17	Incl. Out: 0.9	Azm. Out: 353.3
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Description

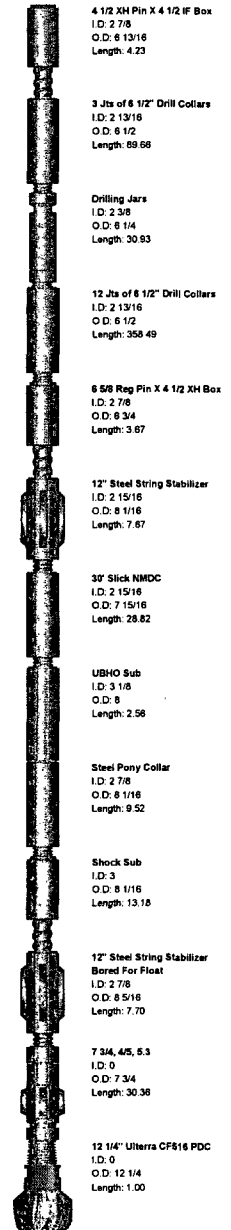
BHA (04/Nov/2018)

Performance

Total Feet: 3,337 Rotary Feet: 3,337 (100.00%) Sliding Feet: 0 (0.00%)
 Jetting Feet: 0 (0.00%) Average ROP: 80.06 Rotary ROP: 80.06 Sliding
 ROP: 0.00 Jetting ROP: 0.00 Total Time: 41.68 Rotary Time: 41.68
 (100.00%) Sliding Time: 0.00 (0.00%) Jetting Time: 0.00 (0.00%)

BHA Components

#	Description	S/N	ID	OD	Length	Sum	Top Conn.	Btm. Conn.	FNL	FNOD
1	12 1/4" Ultrara CF516 PDC	44048	0	12 1/4	1.00	1.00	6 5/8 Regular Pin	0	0.00	0.00
2	7 3/4, 4/5, 5.3	96D335D	0	7 3/4	30.36	31.36	6 5/8 Regular Box	6 5/8 Regular Box	1.88	7.75
3	12" Steel String Stabilizer Bored For Float	AWSS 5013	2 7/8	8 5/16	7.70	39.06	6 5/8 Regular Box	6 5/8 Regular Pin	3.40	8.31
4	Shock Sub	ST5800084	3	8 1/16	13.18	52.24	6 5/8 Regular Box	6 5/8 Regular Pin	1.72	8.06
5	Steel Pony Collar	SS8010DC	2 7/8	8 1/16	9.52	61.76	6 5/8 Regular Box	6 5/8 Regular Pin	0.00	8.06
6	UBHO Sub	9208	3 1/8	8	2.56	64.32	6 5/8 Regular Box	6 5/8 Regular Pin	0.00	8.00
7	30' Slick NMDC	AWS800-30-5170	2 15/16	7 15/16	28.82	93.14	6 5/8 Regular Box	6 5/8 Regular Pin	0.00	7.94
8	12" Steel String Stabilizer	AWSS 5110	2 15/16	8 1/16	7.67	100.81	6 5/8 Regular Box	6 5/8 Regular Pin	3.16	8.06
9	6 5/8 Reg Pin X 4 1/2 XH Box	AWST 5694	2 7/8	6 3/4	3.67	104.48	4 1/2 XH Box	6 5/8 Regular Pin	1.15	6.75
10	12 Jts of 6 1/2" Drill Collars	Rig	2 13/16	6 1/2	358.49	462.97	4 1/2 XH Box	4 1/2 XH Pin	2.00	6.50
11	Drilling Jars	DJ8560224	2 3/8	6 1/4	30.93	493.90	4 1/2 XH Box	4 1/2 XH Pin	4.37	6.25
12	3 Jts of 6 1/2" Drill Collars	Rig	2 13/16	6 1/2	89.66	583.56	4 1/2 XH Box	4 1/2 XH Pin	2.00	6.50
13	4 1/2 XH Pin X 4 1/2 IF Box	AWST 6733	2 7/8	6 13/16	4.23	587.79	4 1/2 IF Box	4 1/2 XH Pin	0.00	6.81



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MSMO-56997: BHA #2 Performance Report



Customer: Breithurn Operating LP	Well Name: Encore M State #22	Rig Name: Nabors M10
County/Parish: Lea	Target Formation: N/A	Company Man: N/A
Field: Wolfcamp Shale	BHA Type: Stabilized Assembly	Lead Directional: John Hornsby (SDS)

BHA Performance Summary

Start Date: 10/Nov/2018 - 03:00	Start Depth: 4,557	Slide Footage: 15	Rotate Footage: 1,848
End Date: 12/Nov/2018 - 24:00	End Depth: 6,420	Slide Hours: 0.15	Rotate Hours: 23.12
Total Time: 69.02	Total Footage: 1,863	Slide %: 0.81%	Rotate %: 99.19%
Below RKB Hours: 66.17	Avg. Total ROP: 80.07	Avg. Slide ROP: 100.00	Avg. Rotate ROP: 79.94
Circ. Only Hours: 9.25	Reason to POOH: Core Point		

Drilling Parameters	Min	Max		Min	Max		Min	Max
SPP Off Bottom:	825	1750	WOB:	5	25	Flow Rate:	351	550
SPP On Bottom:	950	2200	Pick Up:	150	175	SPM:	84	150
Rot Off Bottom:	145	165	Slack Off:	135	155	Diff Pressure:	125	450

Motor Specs

Size: 6 11/16	Lobes: 7/8	Stages: 6.40	Bend°: 1.50	RPG: 0.28	Pad OD: 7 1/8	Description: Mpact 6 3/4, 7/8, 6.4 Fxd @ 1.50° W/ 8 1/4" NBS	Bit to Bend: 4.21	NB Stab: 8.25	Max. Diff: 1,587.00	Rotor Jet: N/A
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Mud Data

	Min	Max		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max
Vis:	0	0	PV:	0	0	MW:	8.6	10.05	% LGS:	0	0	Chlor:	0	0	Oil:	0	0
T°:	0	0	YP:	0	0	WL:	0	0	Solids:	0	0	Gas:	0	0	pH:	0	0

Pumps MFG	Model	Type	Liner	GPS	Efficiency %
1	HH	HHF1600	Triplex	0	95 %
2	HH	HHF1600	Triplex	0	95 %

Bit Data

Manufacturer: N/A	Model: N/A	Type: N/A	Jets: 18-18-18-18-18
TFA: 1.49	Pressure Drop: 90.61	IADC#: N/A	

Sensor Offsets

MWD: 53.00	Sonic: N/A	Gamma: N/A	DNSC: N/A	Resist: N/A	Type: Conventional
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Bit IADC Code

IR: 0	OR: 0	Dull: N/A	Loc: N/A	BS: N/A	G: N/A	ODL: N/A
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Surveys	Incl. In: 0.9	Azm. In: 353.3	Incl. Out: 0.7	Azm. Out: 241.7
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Description

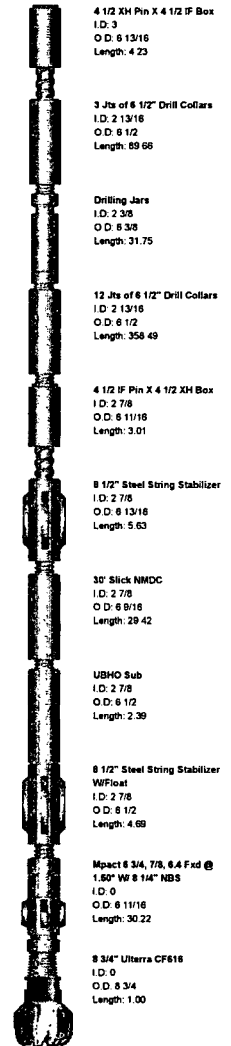
BHA #2 (09/Nov/2018)

Performance

Total Feet: 1,863 Rotary Feet: 1,848 (99.19%) Sliding Feet: 15 (0.81%)
 Jetting Feet: 0 (0.00%) Average ROP: 80.07 Rotary ROP: 79.94 Sliding
 ROP: 100.00 Jetting ROP: 0.00 Total Time: 23.27 Rotary Time: 23.12
 (99.36%) Sliding Time: 0.15 (0.64%) Jetting Time: 0.00 (0.00%)

BHA Components

#	Description	S/N	ID	OD	Length	Sum	Top Conn.	Btm. Conn.	FNL	FNOD
1	8 3/4" Ulterra CF616	42564	0	8 3/4	1.00	1.00	4 1/2 Regular Pin	0	0.00	0.00
2	Mpact 6 3/4, 7/8, 6.4 Fxd @ 1.50° W/ 8 1/4" NBS	67D16769	0	6 11/16	30.22	31.22	4 1/2 IF Box	4 1/2 Regular Box	2.13	6.69
3	8 1/2" Steel String Stabilizer W/Float	Awss 4042	2 7/8	6 1/2	4.69	35.91	4 1/2 IF Box	4 1/2 IF Pin	2.00	6.50
4	UBHO Sub	7317	2 7/8	6 1/2	2.39	38.30	4 1/2 IF Box	4 1/2 IF Pin	0.00	6.50
5	30' Slick NMDC	AWS 675-30-2712	2 7/8	6 9/16	29.42	67.72	4 1/2 IF Box	4 1/2 IF Pin	2.48	6.56
6	8 1/2" Steel String Stabilizer	AWSS 5117	2 7/8	6 13/16	5.63	73.35	4 1/2 IF Box	4 1/2 IF Pin	2.31	6.81
7	4 1/2 IF Pin X 4 1/2 XH Box	AWST 3632	2 7/8	6 11/16	3.01	76.36	4 1/2 XH Box	4 1/2 IF Pin	0.00	6.69
8	12 Jts of 6 1/2" Drill Collars	Rig	2 13/16	6 1/2	358.49	434.85	4 1/2 XH Box	4 1/2 XH Pin	2.00	6.50
9	Drilling Jars	FX 650133	2 3/8	6 3/8	31.75	466.60	4 1/2 XH Box	4 1/2 XH Pin	4.50	6.38
10	3 Jts of 6 1/2" Drill Collars	Rig	2 13/16	6 1/2	89.66	556.26	4 1/2 XH Box	4 1/2 XH Pin	2.00	6.50
11	4 1/2 XH Pin X 4 1/2 IF Box	AWST 6733	3	6 13/16	4.23	560.49	4 1/2 IF Box	4 1/2 XH Pin	0.00	6.81



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Mud Motor Report: BHA #1



Job Number: MSMO-56997	State: New Mexico	Fail?: No
Customer: Breltburn Operating LP	County/Parish: Lea	Lead Directional: John Hornsby (SDS)
Well Name: Encore M State #22	Field: Wolfcamp Shale	Company Man: N/A
Rig Name: Nabors M10	Location: Permian Basin	

Time and Depths (This BHA)				Motor Data			
Date In: 05/Nov/2018	Time In: 23:30	Date Out: 10/Nov/2018	Time Out: 03:00	Stall Pressure: 0	MFG: Mpact	Motor S/N: 96D335D	Pad OD: 9.875
Hours In Hole: 66.28	Start Depth: 1,220	End Depth: 4,557	Total Drilled: 3,337.00	NB Stab: 11.75	Bit to Bend: 7.11	Bent Hsg/Sub: 1.5	Lobe: 4/5
Avg. Total ROP: 80.06	Circ. Hrs. (Tot./Only): 48.70 / 5.65	Percent Slide: 0.00%	Percent Sliding Hours: 0.00%	Stage: 5.3	Rev./GAL: 0.25	Rotor Jet: N/A	Act. BUR: 0.5882
Slide Hours: 0.00	Total Sliding: 0.00	Avg. Slide ROP: 0.00	Percent Rotary: 100.00%	Stator Clearance: 0.00	Lower Stab OD: 11.75	Upper Stab OD: N/A	Extended Motor?: No
Percent Rotary Hours: 41.88%	Rotary Hours: 41.68	Rotary Drilled 3,337.00	Avg. Rotary ROP: 80.06	Number of Stalls: 0	Stall Duration: 0	Prop. BUR: 6	
Reason POOH: Reached casing point for this section @ 4,557'				Description: 7 3/4, 4/5, 5.3			

Drilling Parameters		Min	Max		Min	Max		Min	Max
RPM:		30	70	WOB:	8	28	Flow Rate:	350	752
Flow Temp.°:		0	0	BHT°:	0	113.6	Pick Up:	85	150
Slack Off:		85	135	RAB:	85	145	SPM:	84	180
SPP Off:		450	2000	SPP On:	600	2475	Surface Torque:	3500	12000
Delta Press.:		150	675	In Flow Temp.:	0	0	Out Flow Temp.:	0	0

Bit Record		Jets: 18-18-18-18-18-18		Formations	
Manufacturer: N/A	Description: N/A	Run #: 0	Type Bit: N/A	Rustler / Penrose / Grayburg / Tansil / Queen / San Andres / Yates / Seven Rivers	
IADC#: N/A	TFA#: 1.74	Condition: N/A	Bit Drop: 26.32 - 146.41		

BHA Performance		Expanded Reason Pulled	
Total Feet: 3,337 Rotary Feet: 3,337 (100.00%) Sliding Feet: 0 (0.00%) Jetting Feet: 0 (0.00%) Avera		Reached casing point for this section @ 4,557'	

Mud Data																		
Type		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max
Brine	Wt:	0	10.05	Vis:	0	30	WL:	0	88.4	PV:	0	1	T°:	0	55	% LGS:	0	3.47
	Gas:	0	0	Sol:	0	11.6	Oil %:	0	0	YP:	0	1	pH:	0	9	BHT°:	113.6	113.6
Fresh Water	Wt:	0	0	Vis:	0	0	WL:	0	0	PV:	0	0	T°:	0	0	% LGS:	0	0
	Gas:	0	0	Sol:	0	0	Oil %:	0	0	YP:	0	0	pH:	0	0	BHT°:	113.6	113.6

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Mud Motor Report: BHA #2



Job Number: MSMO-56997	State: New Mexico	Fail?: No
Customer: Bretburn Operating LP	County/Parish: Lea	Lead Directional: John Hornsby (SDS)
Well Name: Encore M State #22	Field: Wolfcamp Shale	Company Man: N/A
Rig Name: Nabors M10	Location: Permian Basin	

Time and Depths (This BHA)

Date In: 10/Nov/2018	Time In: 03:00	Date Out: 12/Nov/2018	Time Out: 24:00
Hours In Hole: 66.17	Start Depth: 4,557	End Depth: 6,420	Total Drilled: 1,863.00
Avg. Total ROP: 80.07	Circ. Hrs. (Tot./Only): 33.43 / 9.25	Percent Slide: 0.81%	Percent Sliding Hours: 0.22%
Slide Hours: 0.15	Total Sliding: 15.00	Avg. Slide ROP: 100.00	Percent Rotary: 99.19%
Percent Rotary Hours: 33.49%	Rotary Hours: 23.12	Rotary Drilled 1,848.00	Avg. Rotary ROP: 79.94

Reason POOH:
Core Point

Motor Data

Stall Pressure: 0	MFG: Mpact	Motor S/N: 67D16769	Pad OD: 7.125
NB Stab: 8.25	Bit to Bend: 4.21	Bent Hsg/Sub: 1.5	Lobe: 7/8
Stage: 6.4	Rev./GAL: 0.28	Rotor Jet: N/A	Act. BUR: 0.9091
Stator Clearance: 0.01	Lower Stab OD: 8.25	Upper Stab OD: N/A	Extended Motor?: No
Number of Stalls: 0	Stall Duration: 0	Prop. BUR: 6	

Description:
Mpact 6 3/4, 7/8, 6.4 Fxd @ 1.50" W/ 8 1/4" NBS

Drilling Parameters	Min	Max		Min	Max		Min	Max
RPM:	30	70	WOB:	5	25	Flow Rate:	351	550
Flow Temp.°:	0	0	BHT°:	100.1	113.6	Pick Up:	150	175
Slack Off:	135	155	RAB:	145	165	SPM:	84	150
SPP Off:	825	1750	SPP On:	950	2200	Surface Torque:	0	10000
Delta Press.:	125	450	In Flow Temp.:	0	0	Out Flow Temp.:	0	0

Bit Record

Manufacturer: N/A	Description: N/A	Run #: 0	Jets: 18-18-18-18-18 Type Bit: N/A
IADC#: N/A	TFA#: 1.49	Condition: N/A	Bit Drop: 36.90 - 90.61

Formations

Blinberry / Glorieta / San Andres / Drinkard / Tubb

BHA Performance

Total Feet: 1,863 Rotary Feet: 1,848 (99.19%) Sliding Feet: 15 (0.81%) Jetting Feet: 0 (0.00%) Avera

Expanded Reason Pulled

Core Point

Mud Data

Type	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Brine	Wt: 10.05	10.05	Vis: 0	0	WL: 0	0	PV: 0	0	T°: 0	0	% LGS: 0	0	Chlor: 0	0		
	Gas: 0	0	Sol: 0	0	Oil %: 0	0	YP: 0	0	pH: 0	0	BHT°: 113.6	113.6				
Fresh Water	Wt: 8.6	8.6	Vis: 0	0	WL: 0	0	PV: 0	0	T°: 0	0	% LGS: 0	0	Chlor: 0	0		
	Gas: 0	0	Sol: 0	0	Oil %: 0	0	YP: 0	0	pH: 0	0	BHT°: 113.6	113.6				

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Slide Sheet



Job Number: MSMO-56997	Customer: Breitbart Operating LP	State: New Mexico	County/Parish: Lea
Well Name: Encore M State #22	Rig Name: Nabors M10	Field: Wolfcamp Shale	Location: Permian Basin

Slide Report for BHA # 1

Motor Description: 73/4" 9 5/8" Hybrid 4/5 5.3 Adj. @ 1.50" W/ 11 3/4" NBS - Bent Hsg/Sub: 1.5 - Bit to Bend: 7.11 - Pad O.D.: 9 7/8 - NB Stab: 11.75

Date	Mode	Start	End	Hours	Start MD	End MD	Feet	WOB (,000)	ROP	RPM TFO	Torque (,000)	Flow Rate	SPP	INC	AZM	DLS	TFO	BUR	TR
06Nov	Rotating	10:50	11:00	0.15	1,220	1,230	10	0.008	66.67	30	3.5	350	600	0.89	290.79	0.28	-89.03	0.02	-17.94
06Nov	Rotating	16:30	18:00	1.50	1,230	1,341	111	0.015	74.00	30	3.5	350	600	0.90	284.54	0.01	-90.55	0.00	-0.59
06Nov	Rotating	18:00	21:15	3.25	1,341	1,623	282	0.018	86.77	60	6	418	1,050	0.90	279.62	0.04	-92.35	0.00	-2.49
06Nov	Rotating	21:15	22:00	0.75	1,623	1,717	94	0.02	125.33	70	9	627	1,700	0.80	288.56	0.22	131.04	-0.13	12.15
06Nov	Rotating	22:00	23:10	1.17	1,717	1,906	189	0.025	162.00	70	9	710	2,075	0.82	311.89	0.18	35.46	0.15	7.42
06Nov	Rotating	23:10	24:00	0.83	1,906	2,040	134	0.02	160.81	70	9	710	2,100	0.96	319.17	0.21	148.12	-0.17	6.55
07Nov	Rotating	00:00	01:30	1.50	2,040	2,265	225	0.02	150.00	70	9	752	2,250	0.71	345.27	0.21	91.12	0.02	17.33
07Nov	Rotating	01:30	03:15	1.75	2,265	2,455	190	0.015	108.57	55	9	752	2,150	0.87	2.91	0.11	-23.51	0.11	-3.01
07Nov	Rotating	03:15	03:50	0.60	2,455	2,505	50	0.02	83.33	55	9	752	2,250	0.92	1.60	0.11	-23.51	0.11	-2.83
07Nov	Rotating	03:50	05:10	1.33	2,505	2,640	135	0.028	101.25	60	12	752	2,475	0.94	359.44	0.11	-173.24	-0.11	-0.77
07Nov	Rotating	05:10	08:00	2.85	2,640	2,860	220	0.028	77.19	60	6.5	752	2,400	0.85	358.15	0.05	-0.90	0.05	-0.06
07Nov	Rotating	08:00	11:30	3.50	2,860	3,129	269	0.028	76.86	60	7.5	670	2,150	0.90	346.84	0.10	-96.15	0.00	-6.55
07Nov	Rotating	11:30	14:45	3.25	3,129	3,400	271	0.028	83.38	60	9	670	2,400	1.00	339.70	0.07	-93.65	0.00	-3.88
07Nov	Rotating	14:45	16:00	1.25	3,400	3,500	100	0.028	80.00	60	9	670	2,400	1.00	335.81	0.07	-93.65	0.00	-3.88
07Nov	Rotating	16:00	17:30	1.50	3,500	3,598	98	0.028	65.33	60	9	752	2,400	0.92	335.25	0.11	177.20	-0.11	0.32
07Nov	Rotating	19:00	20:00	1.00	3,598	3,635	37	0.028	37.00	60	9	752	2,475	0.88	335.38	0.11	177.20	-0.11	0.34
07Nov	Rotating	20:00	21:00	1.00	3,635	3,675	40	0.027	40.00	50	9	752	2,475	0.84	335.55	0.11	177.20	-0.11	0.35
07Nov	Rotating	21:30	22:00	0.50	3,675	3,691	16	0.028	32.00	40	9	712	2,225	0.82	335.61	0.11	177.20	-0.11	0.36
07Nov	Rotating	22:00	24:00	2.00	3,691	3,806	115	0.025	57.50	50	9	712	2,225	0.80	334.83	0.01	-90.85	0.00	-0.90
08Nov	Rotating	00:00	01:30	1.50	3,806	3,900	94	0.025	62.67	50	9	712	2,300	0.80	334.14	0.12	123.85	-0.07	7.14
08Nov	Rotating	01:30	12:00	10.50	3,900	4,557	657	0.02	62.57	50	7.5	630	2,000	0.79	343.18	0.24	-131.72	-0.14	-12.97

Summarize

Total Feet:	Rotary Feet:	Sliding Feet:	Jetting Feet:	Average ROP:	Rotary ROP:	Sliding ROP:	Jetting ROP:	Total Time:	Rotary Time:	Sliding Time:	Jetting Time:
3,337	3,337	0	0	80.06	80.06	0.00	0.00	41.68	41.68	0.00	0.00
	(100.00%)	(0.00%)	(0.00%)						(100.00%)	(0.00%)	(0.00%)

Slide Report for BHA # 2

Motor Description: Mpack 6 3/4, 7/8, 6.4 Fxd @ 1.50" W/ 8 1/4" NBS - Bent Hsg/Sub: 1.5 - Bit to Bend: 4.21 - Pad O.D.: 7 1/8 - NB Stab: 8.25

Date	Mode	Start	End	Hours	Start MD	End MD	Feet	WOB (,000)	ROP	RPM TFO	Torque (,000)	Flow Rate	SPP	INC	AZM	DLS	TFO	BUR	TR
10Nov	Rotating	18:40	18:45	0.08	4,557	4,567	10	0.005	120.05	30	7.5	351	950	0.78	341.68	0.24	-131.72	-0.14	-13.20
10Nov	Rotating	19:49	21:00	1.18	4,567	4,607	40	0.005	33.80	30	3	351	950	0.73	335.24	0.24	-131.72	-0.13	-14.11
10Nov	Rotating	21:00	21:30	0.50	4,607	4,639	32	0.015	64.00	40	3	418	1,300	0.71	329.57	0.24	-131.72	-0.12	-14.83
10Nov	Rotating	21:30	24:00	2.50	4,639	4,815	176	0.02	70.40	70	7	500	1,875	0.70	338.21	0.08	95.80	0.00	6.17
11Nov	Rotating	00:00	03:00	3.00	4,815	5,075	260	0.025	86.67	70	8	500	1,875	1.05	338.50	0.15	-48.56	0.10	-5.99
11Nov	Rotating	03:00	07:00	4.00	5,075	5,480	405	0.025	101.25	70	10	500	1,875	1.04	333.92	0.13	72.97	0.05	7.07
11Nov	Rotating	07:00	11:20	4.35	5,480	5,837	357	0.025	82.07	50	8.5	550	2,200	1.05	317.15	0.73	-150.78	-0.60	-19.58
11Nov	Sliding	11:20	11:30	0.15	5,837	5,852	15	0.022	100.00	N/A	0	550	2,050	0.97	312.93	0.73	-150.78	-0.59	-21.33
11Nov	Rotating	11:30	14:15	2.75	5,852	6,075	223	0.025	81.09	50	8.5	550	2,100	0.76	259.08	0.07	43.18	0.05	3.60
11Nov	Rotating	14:15	16:30	2.25	6,075	6,230	155	0.025	68.89	50	8.5	550	2,100	0.68	259.90	0.16	-170.52	-0.16	-2.27
11Nov	Rotating	16:30	19:00	2.50	6,230	6,420	190	0.025	76.00	50	8.5	550	2,100	N/A	N/A	N/A	N/A	N/A	N/A

Summarize

Total Feet:	Rotary Feet:	Sliding Feet:	Jetting Feet:	Average ROP:	Rotary ROP:	Sliding ROP:	Jetting ROP:	Total Time:	Rotary Time:	Sliding Time:	Jetting Time:
1,863	1,848	15	0	80.07	79.94	100.00	0.00	23.27	23.12	0.15	0.00
	(99.19%)	(0.81%)	(0.00%)						(99.36%)	(0.64%)	(0.00%)

General Summary

Total Feet:	Rotary Feet:	Sliding Feet:	Jetting Feet:	Average ROP:	Rotary ROP:	Sliding ROP:	Jetting ROP:	Total Time:	Rotary Time:	Sliding Time:	Jetting Time:
5,200	5,185	15 (0.29%)	0 (0.00%)	80.06	80.02	100.00	0.00	64.95	64.80	0.15 (0.23%)	0.00 (0.00%)
	(99.71%)								(99.77%)		

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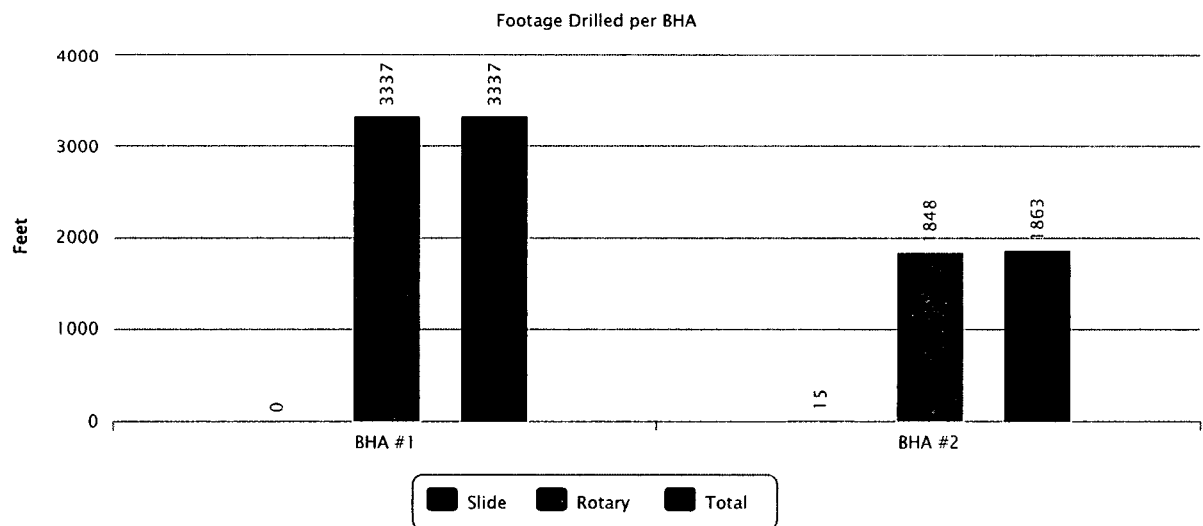
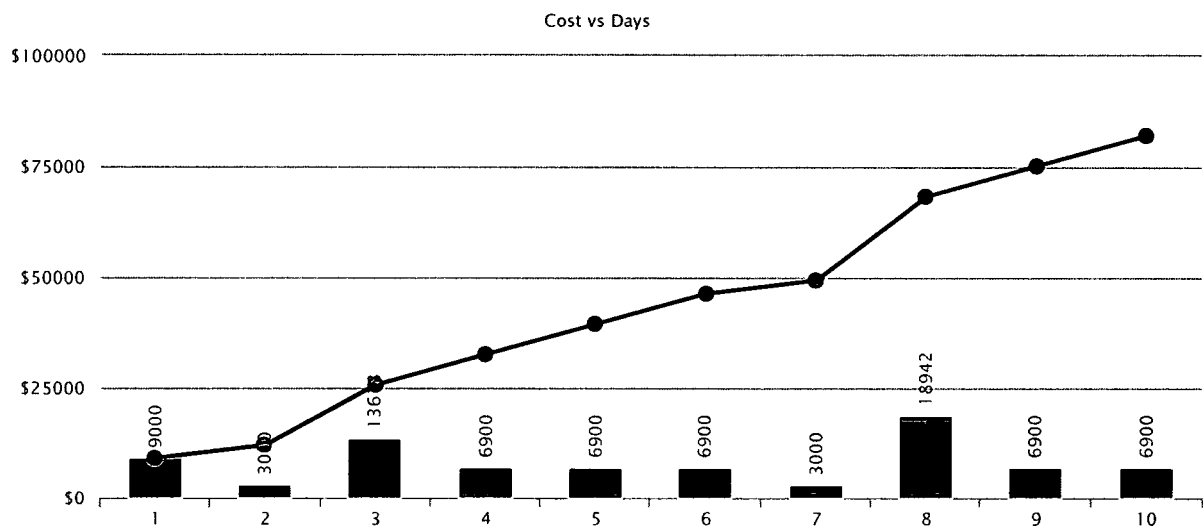
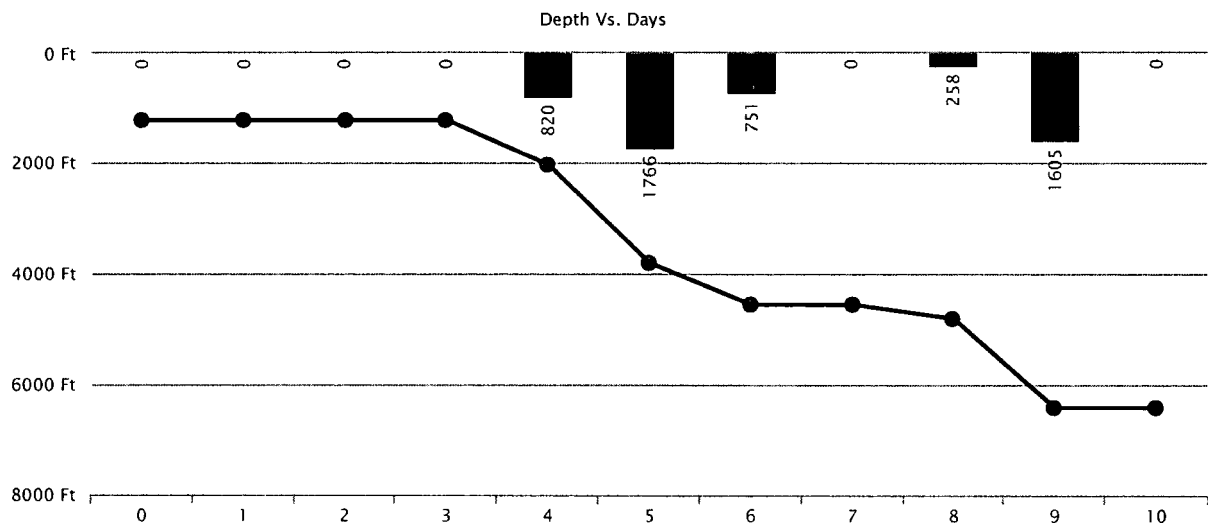
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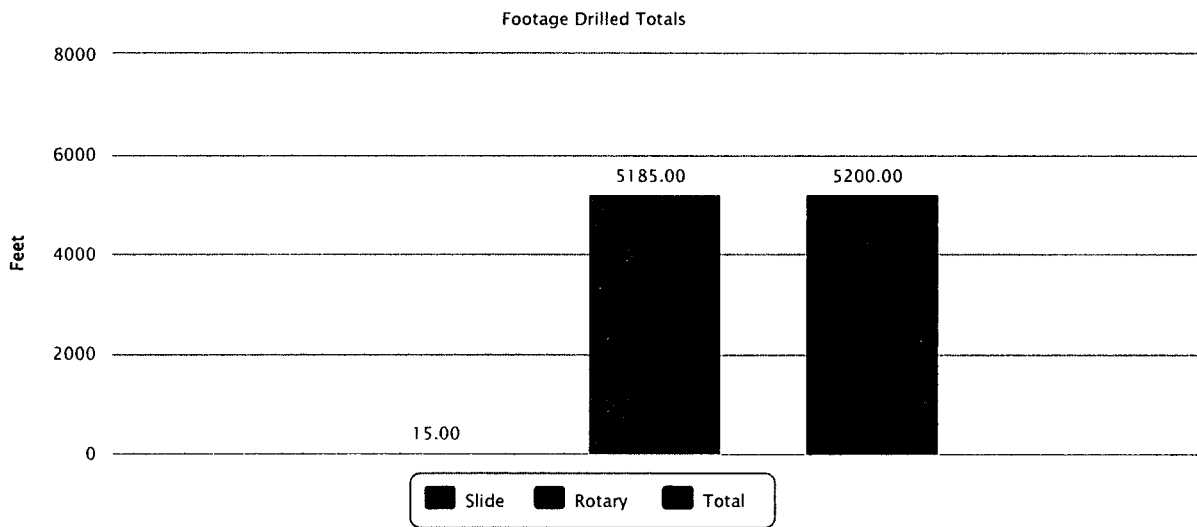
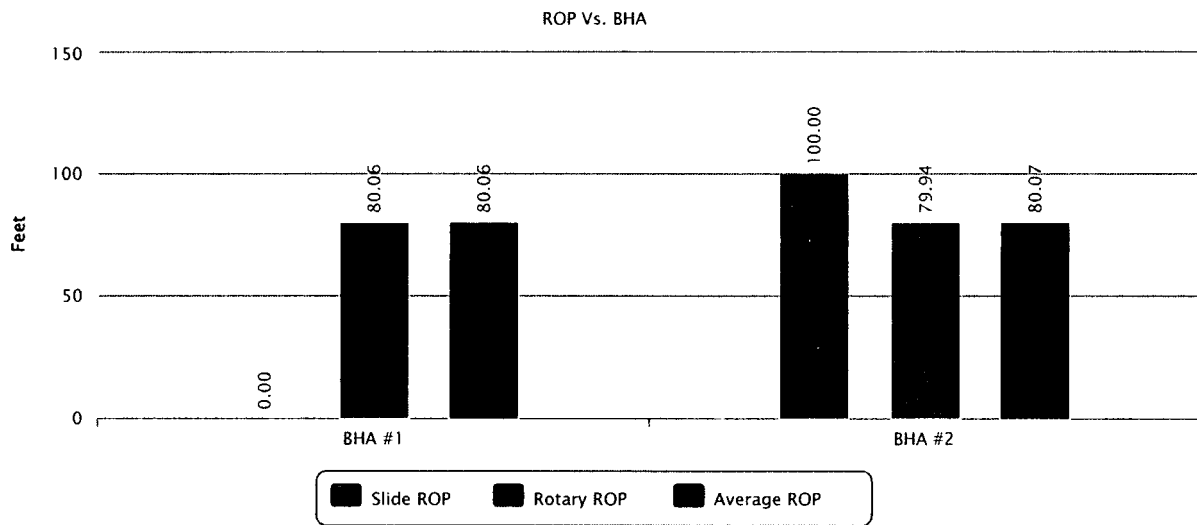


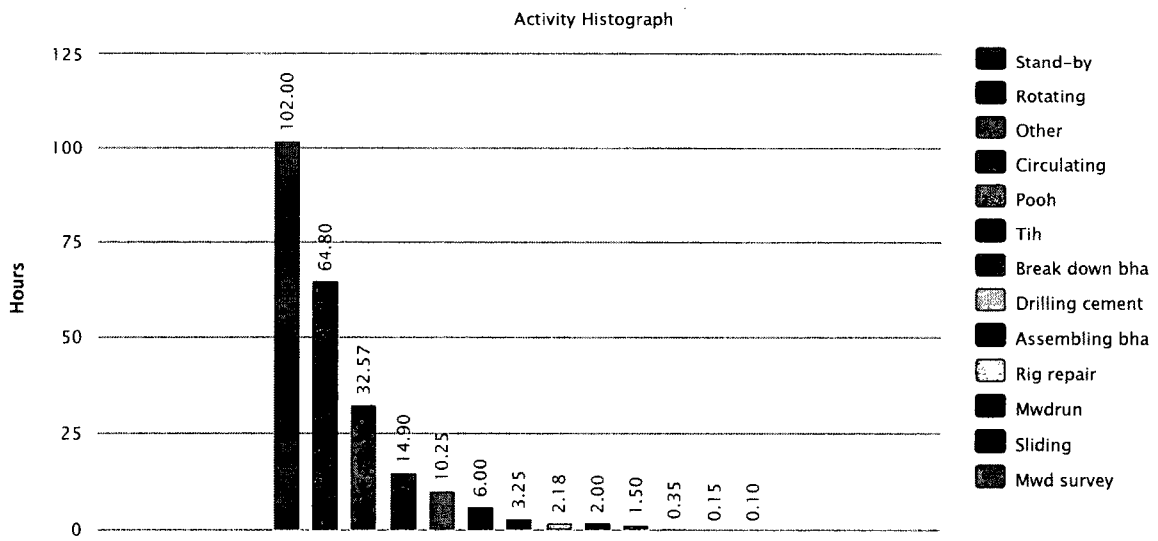
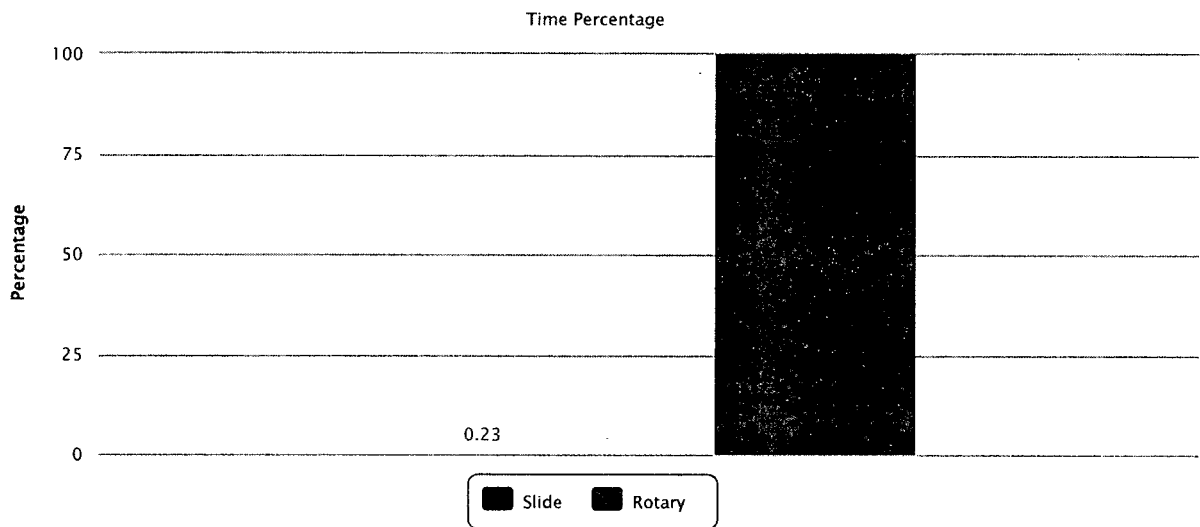
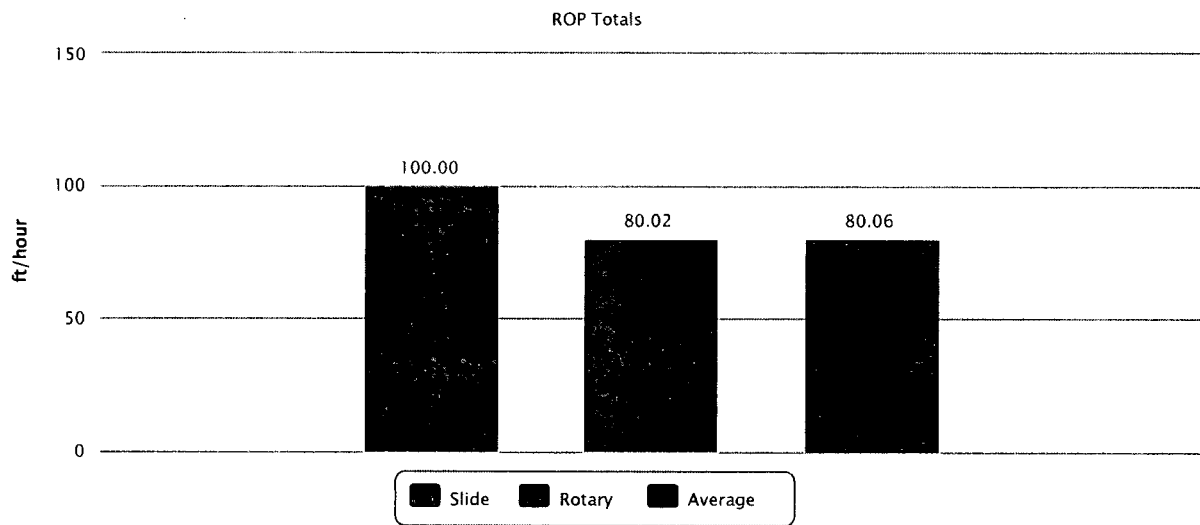
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MSMO-56997	Breitbart Operating LP	Encore M State #22	Nabors M10

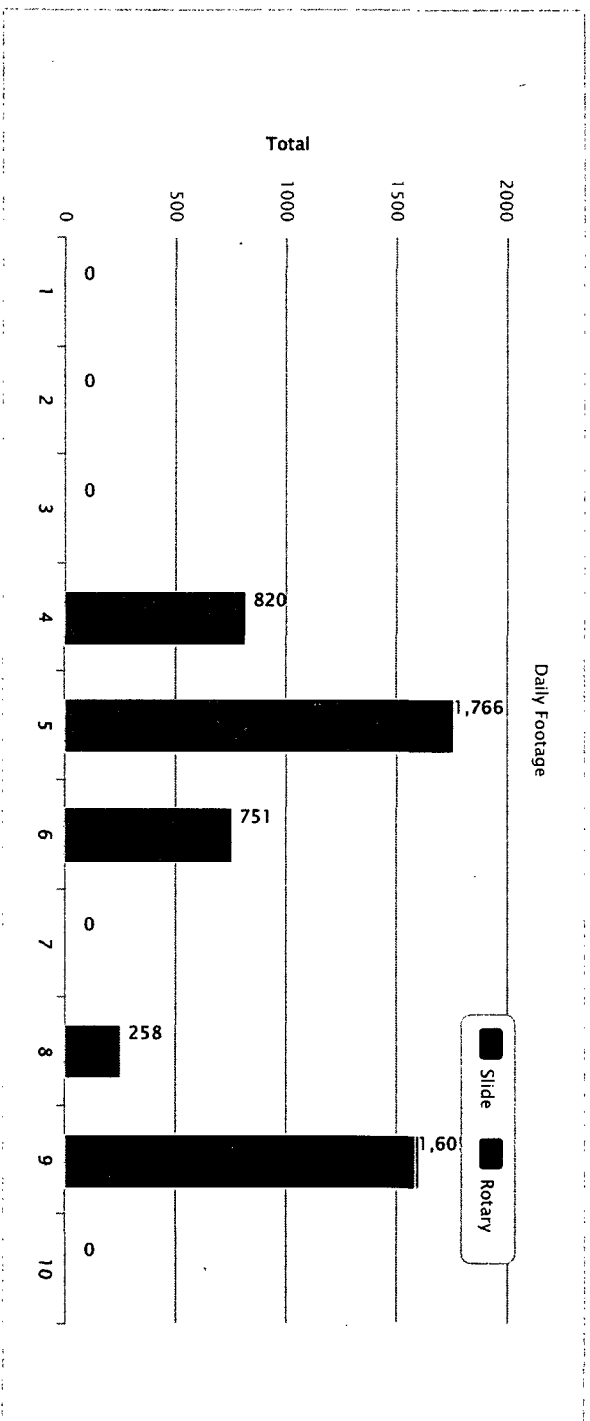
Day	BHA	Wellbore	Section	Phase	Cost Code	Charged By	Units	Unit Cost	Sub-Total
03/Nov/2018	N/A	OH	Surface	Vertical	standby for equipment +3 Hands	DAY	1	\$3,000.00	\$3,000.00
03/Nov/2018	N/A	OH	Surface	Vertical	Mob/ Demob	Each	1	\$6,000.00	\$6,000.00
04/Nov/2018	N/A	OH	Surface	Vertical	standby for equipment +3 Hands	DAY	1	\$3,000.00	\$3,000.00
05/Nov/2018	1	OH	Intermediate 01	Vertical	Stabilizer Re-work	Item	2	\$978.00	\$1,956.00
05/Nov/2018	1	OH	Intermediate 01	Vertical	Stab Cost - 10" - 12 1/4" Steel String Stab	Item	2	\$2,381.00	\$4,762.00
05/Nov/2018	1	OH	Intermediate 01	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
06/Nov/2018	1	OH	Intermediate 01	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
07/Nov/2018	1	OH	Intermediate 01	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
08/Nov/2018	1	OH	Intermediate 01	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
09/Nov/2018	N/A	N/A	N/A	N/A	standby for equipment +3 Hands	DAY	1	\$3,000.00	\$3,000.00
10/Nov/2018	2	OH	Production	Vertical	Additional MWD Inspection/Rebuild	Each	1	\$1,250.00	\$1,250.00
10/Nov/2018	2	OH	Production	Vertical	Stabilizer Re-work	Item	2	\$978.00	\$1,956.00
10/Nov/2018	2	OH	Production	Vertical	Additional Motor Rebuild Charge	Each	1	\$2,500.00	\$2,500.00
10/Nov/2018	2	OH	Production	Vertical	Stab Cost - 7" - 8 3/4" Steel String Stab	Item	2	\$1,518.00	\$3,036.00
10/Nov/2018	2	OH	Production	Vertical	Additional Inspect/Recut/Redress	Each	6	\$550.00	\$3,300.00
10/Nov/2018	2	OH	Production	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
11/Nov/2018	2	OH	Production	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
12/Nov/2018	2	OH	Production	Vertical	2DD/1MWD Day Rate	DAY	1	\$6,900.00	\$6,900.00
Total:									\$82,060.00
\$/Ft:									\$15.78
\$/Day:									\$8,206.00

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