OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
PLATINUM MDP1 34-3 FED COM
PLATINUM MDP1 34-3 FED COM 171H

WB00

Plan: Permitting Plan

Standard Planning Report

21 May, 2019

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	**North Reference:**	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site PLATINUM MDP1 34-3 FED COM

Site Position:		**Northing:**	461,352.44 usft	**Latitude:**	32° 16' 1.502765 N
From:	Map	**Easting:**	714,923.95 usft	**Longitude:**	103° 46' 18.211063 W
Position Uncertainty:	50.00 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.30 °

Well PLATINUM MDP1 34-3 FED COM 171H

Well Position	**+N/-S**	181.49 ft	**Northing:**	461,533.92 usft	**Latitude:**	32° 16' 3.285181 N
	+E/-W	259.04 ft	**Easting:**	715,182.97 usft	**Longitude:**	103° 46' 15.183263 W
Position Uncertainty		2.00 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	3,423.20 ft

Wellbore WB00

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/28/2018	6.88	60.02	48,086

Design Permitting Plan

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	183.60

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,765.00	0.00	0.00	4,765.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,264.98	10.00	317.46	5,262.44	32.06	-29.42	2.00	2.00	0.00	317.46	
10,512.40	10.00	317.46	10,430.15	703.40	-645.48	0.00	0.00	0.00	0.00	
11,444.46	10.00	179.74	11,356.24	681.91	-700.31	2.00	0.00	-14.78	-158.56	
12,246.11	90.16	179.74	11,829.70	116.02	-697.72	10.00	10.00	0.00	0.00	FTP (Platinum
22,695.86	90.16	179.74	11,799.70	-10,333.58	-649.93	0.00	0.00	0.00	0.00	PBHL (Platinum

Database:	HOPSPP	Local Co-ordinate Reference:	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	North Reference:	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,765.00	0.00	0.00	4,765.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.70	317.46	4,800.00	0.16	-0.14	-0.15	2.00	2.00	0.00
4,900.00	2.70	317.46	4,899.95	2.34	-2.15	-2.20	2.00	2.00	0.00
5,000.00	4.70	317.46	4,999.74	7.10	-6.51	-6.67	2.00	2.00	0.00
5,100.00	6.70	317.46	5,099.24	14.42	-13.23	-13.56	2.00	2.00	0.00
5,200.00	8.70	317.46	5,198.33	24.29	-22.29	-22.84	2.00	2.00	0.00

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	**North Reference:**	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,264.98	10.00	317.46	5,262.44	32.06	-29.42	-30.15	2.00	2.00	0.00
5,300.00	10.00	317.46	5,296.93	36.54	-33.54	-34.37	0.00	0.00	0.00
5,400.00	10.00	317.46	5,395.41	49.34	-45.28	-46.40	0.00	0.00	0.00
5,500.00	10.00	317.46	5,493.90	62.13	-57.02	-58.43	0.00	0.00	0.00
5,600.00	10.00	317.46	5,592.38	74.93	-68.76	-70.46	0.00	0.00	0.00
5,700.00	10.00	317.46	5,690.86	87.72	-80.50	-82.49	0.00	0.00	0.00
5,800.00	10.00	317.46	5,789.34	100.51	-92.24	-94.53	0.00	0.00	0.00
5,900.00	10.00	317.46	5,887.82	113.31	-103.98	-106.56	0.00	0.00	0.00
6,000.00	10.00	317.46	5,986.30	126.10	-115.72	-118.59	0.00	0.00	0.00
6,100.00	10.00	317.46	6,084.78	138.89	-127.46	-130.62	0.00	0.00	0.00
6,200.00	10.00	317.46	6,183.26	151.69	-139.20	-142.65	0.00	0.00	0.00
6,300.00	10.00	317.46	6,281.74	164.48	-150.94	-154.68	0.00	0.00	0.00
6,400.00	10.00	317.46	6,380.22	177.27	-162.68	-166.71	0.00	0.00	0.00
6,500.00	10.00	317.46	6,478.70	190.07	-174.42	-178.75	0.00	0.00	0.00
6,600.00	10.00	317.46	6,577.19	202.86	-186.16	-190.78	0.00	0.00	0.00
6,700.00	10.00	317.46	6,675.67	215.66	-197.90	-202.81	0.00	0.00	0.00
6,800.00	10.00	317.46	6,774.15	228.45	-209.64	-214.84	0.00	0.00	0.00
6,900.00	10.00	317.46	6,872.63	241.24	-221.38	-226.87	0.00	0.00	0.00
7,000.00	10.00	317.46	6,971.11	254.04	-233.12	-238.90	0.00	0.00	0.00
7,100.00	10.00	317.46	7,069.59	266.83	-244.86	-250.94	0.00	0.00	0.00
7,200.00	10.00	317.46	7,168.07	279.62	-256.60	-262.97	0.00	0.00	0.00
7,300.00	10.00	317.46	7,266.55	292.42	-268.34	-275.00	0.00	0.00	0.00
7,400.00	10.00	317.46	7,365.03	305.21	-280.08	-287.03	0.00	0.00	0.00
7,500.00	10.00	317.46	7,463.51	318.01	-291.82	-299.06	0.00	0.00	0.00
7,600.00	10.00	317.46	7,561.99	330.80	-303.56	-311.09	0.00	0.00	0.00
7,700.00	10.00	317.46	7,660.48	343.59	-315.30	-323.12	0.00	0.00	0.00
7,800.00	10.00	317.46	7,758.96	356.39	-327.04	-335.16	0.00	0.00	0.00
7,900.00	10.00	317.46	7,857.44	369.18	-338.78	-347.19	0.00	0.00	0.00
8,000.00	10.00	317.46	7,955.92	381.97	-350.52	-359.22	0.00	0.00	0.00
8,100.00	10.00	317.46	8,054.40	394.77	-362.26	-371.25	0.00	0.00	0.00
8,200.00	10.00	317.46	8,152.88	407.56	-374.00	-383.28	0.00	0.00	0.00
8,300.00	10.00	317.46	8,251.36	420.35	-385.74	-395.31	0.00	0.00	0.00
8,400.00	10.00	317.46	8,349.84	433.15	-397.48	-407.35	0.00	0.00	0.00
8,500.00	10.00	317.46	8,448.32	445.94	-409.22	-419.38	0.00	0.00	0.00
8,600.00	10.00	317.46	8,546.80	458.74	-420.96	-431.41	0.00	0.00	0.00
8,700.00	10.00	317.46	8,645.28	471.53	-432.70	-443.44	0.00	0.00	0.00
8,800.00	10.00	317.46	8,743.77	484.32	-444.44	-455.47	0.00	0.00	0.00
8,900.00	10.00	317.46	8,842.25	497.12	-456.18	-467.50	0.00	0.00	0.00
9,000.00	10.00	317.46	8,940.73	509.91	-467.92	-479.53	0.00	0.00	0.00
9,100.00	10.00	317.46	9,039.21	522.70	-479.66	-491.57	0.00	0.00	0.00
9,200.00	10.00	317.46	9,137.69	535.50	-491.40	-503.60	0.00	0.00	0.00
9,300.00	10.00	317.46	9,236.17	548.29	-503.14	-515.63	0.00	0.00	0.00
9,400.00	10.00	317.46	9,334.65	561.08	-514.88	-527.66	0.00	0.00	0.00
9,500.00	10.00	317.46	9,433.13	573.88	-526.62	-539.69	0.00	0.00	0.00
9,600.00	10.00	317.46	9,531.61	586.67	-538.36	-551.72	0.00	0.00	0.00
9,700.00	10.00	317.46	9,630.09	599.47	-550.10	-563.75	0.00	0.00	0.00
9,800.00	10.00	317.46	9,728.58	612.26	-561.84	-575.79	0.00	0.00	0.00
9,900.00	10.00	317.46	9,827.06	625.05	-573.58	-587.82	0.00	0.00	0.00
10,000.00	10.00	317.46	9,925.54	637.85	-585.32	-599.85	0.00	0.00	0.00
10,100.00	10.00	317.46	10,024.02	650.64	-597.07	-611.88	0.00	0.00	0.00
10,200.00	10.00	317.46	10,122.50	663.43	-608.81	-623.91	0.00	0.00	0.00
10,300.00	10.00	317.46	10,220.98	676.23	-620.55	-635.94	0.00	0.00	0.00
10,400.00	10.00	317.46	10,319.46	689.02	-632.29	-647.98	0.00	0.00	0.00
10,500.00	10.00	317.46	10,417.94	701.81	-644.03	-660.01	0.00	0.00	0.00

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	**North Reference:**	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,512.40	10.00	317.46	10,430.15	703.40	-645.48	-661.50	0.00	0.00	0.00
10,600.00	8.39	313.07	10,516.63	713.37	-655.30	-670.83	2.00	-1.83	-5.01
10,700.00	6.65	305.54	10,615.76	721.72	-665.34	-678.54	2.00	-1.74	-7.53
10,800.00	5.09	293.10	10,715.24	726.83	-674.13	-683.08	2.00	-1.55	-12.44
10,900.00	3.96	271.94	10,814.93	728.69	-681.67	-684.46	2.00	-1.13	-21.16
11,000.00	3.66	241.83	10,914.72	727.29	-687.94	-682.68	2.00	-0.30	-30.11
11,100.00	4.38	214.81	11,014.48	722.65	-692.94	-677.73	2.00	0.71	-27.02
11,200.00	5.73	197.91	11,114.10	714.77	-696.65	-669.63	2.00	1.36	-16.90
11,300.00	7.39	187.98	11,213.44	703.65	-699.08	-658.38	2.00	1.65	-9.93
11,400.00	9.18	181.78	11,312.40	689.31	-700.22	-644.00	2.00	1.79	-6.20
11,444.46	10.00	179.74	11,356.24	681.91	-700.31	-636.61	2.00	1.85	-4.58
11,500.00	15.55	179.74	11,410.38	669.63	-700.25	-624.36	10.00	10.00	0.00
11,600.00	25.55	179.74	11,503.90	634.57	-700.09	-589.37	10.00	10.00	0.00
11,700.00	35.55	179.74	11,589.90	583.80	-699.86	-538.72	10.00	10.00	0.00
11,800.00	45.55	179.74	11,665.78	518.86	-699.56	-473.93	10.00	10.00	0.00
11,900.00	55.55	179.74	11,729.24	441.74	-699.21	-396.98	10.00	10.00	0.00
12,000.00	65.55	179.74	11,778.34	354.77	-698.81	-310.21	10.00	10.00	0.00
12,100.00	75.55	179.74	11,811.59	260.60	-698.38	-216.25	10.00	10.00	0.00
12,200.00	85.55	179.74	11,827.98	162.08	-697.93	-117.95	10.00	10.00	0.00
12,246.11	90.16	179.74	11,829.70	116.02	-697.72	-71.99	10.00	10.00	0.00
12,300.00	90.16	179.74	11,829.55	62.12	-697.47	-18.22	0.00	0.00	0.00
12,400.00	90.16	179.74	11,829.26	-37.88	-697.02	81.55	0.00	0.00	0.00
12,500.00	90.16	179.74	11,828.97	-137.87	-696.56	181.32	0.00	0.00	0.00
12,600.00	90.16	179.74	11,828.68	-237.87	-696.10	281.10	0.00	0.00	0.00
12,700.00	90.16	179.74	11,828.40	-337.87	-695.64	380.87	0.00	0.00	0.00
12,800.00	90.16	179.74	11,828.11	-437.87	-695.19	480.64	0.00	0.00	0.00
12,900.00	90.16	179.74	11,827.82	-537.87	-694.73	580.41	0.00	0.00	0.00
13,000.00	90.16	179.74	11,827.54	-637.87	-694.27	680.19	0.00	0.00	0.00
13,100.00	90.16	179.74	11,827.25	-737.87	-693.82	779.96	0.00	0.00	0.00
13,200.00	90.16	179.74	11,826.96	-837.86	-693.36	879.73	0.00	0.00	0.00
13,300.00	90.16	179.74	11,826.67	-937.86	-692.90	979.50	0.00	0.00	0.00
13,400.00	90.16	179.74	11,826.39	-1,037.86	-692.44	1,079.28	0.00	0.00	0.00
13,500.00	90.16	179.74	11,826.10	-1,137.86	-691.99	1,179.05	0.00	0.00	0.00
13,600.00	90.16	179.74	11,825.81	-1,237.86	-691.53	1,278.82	0.00	0.00	0.00
13,700.00	90.16	179.74	11,825.53	-1,337.86	-691.07	1,378.60	0.00	0.00	0.00
13,800.00	90.16	179.74	11,825.24	-1,437.85	-690.61	1,478.37	0.00	0.00	0.00
13,900.00	90.16	179.74	11,824.95	-1,537.85	-690.16	1,578.14	0.00	0.00	0.00
14,000.00	90.16	179.74	11,824.67	-1,637.85	-689.70	1,677.91	0.00	0.00	0.00
14,100.00	90.16	179.74	11,824.38	-1,737.85	-689.24	1,777.69	0.00	0.00	0.00
14,200.00	90.16	179.74	11,824.09	-1,837.85	-688.78	1,877.46	0.00	0.00	0.00
14,300.00	90.16	179.74	11,823.80	-1,937.85	-688.33	1,977.23	0.00	0.00	0.00
14,400.00	90.16	179.74	11,823.52	-2,037.85	-687.87	2,077.00	0.00	0.00	0.00
14,500.00	90.16	179.74	11,823.23	-2,137.84	-687.41	2,176.78	0.00	0.00	0.00
14,600.00	90.16	179.74	11,822.94	-2,237.84	-686.95	2,276.55	0.00	0.00	0.00
14,700.00	90.16	179.74	11,822.66	-2,337.84	-686.50	2,376.32	0.00	0.00	0.00
14,800.00	90.16	179.74	11,822.37	-2,437.84	-686.04	2,476.09	0.00	0.00	0.00
14,900.00	90.16	179.74	11,822.08	-2,537.84	-685.58	2,575.87	0.00	0.00	0.00
15,000.00	90.16	179.74	11,821.79	-2,637.84	-685.13	2,675.64	0.00	0.00	0.00
15,100.00	90.16	179.74	11,821.51	-2,737.84	-684.67	2,775.41	0.00	0.00	0.00
15,200.00	90.16	179.74	11,821.22	-2,837.83	-684.21	2,875.18	0.00	0.00	0.00
15,300.00	90.16	179.74	11,820.93	-2,937.83	-683.75	2,974.96	0.00	0.00	0.00
15,400.00	90.16	179.74	11,820.65	-3,037.83	-683.30	3,074.73	0.00	0.00	0.00
15,500.00	90.16	179.74	11,820.36	-3,137.83	-682.84	3,174.50	0.00	0.00	0.00
15,600.00	90.16	179.74	11,820.07	-3,237.83	-682.38	3,274.28	0.00	0.00	0.00

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	**North Reference:**	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,700.00	90.16	179.74	11,819.78	-3,337.83	-681.92	3,374.05	0.00	0.00	0.00
15,800.00	90.16	179.74	11,819.50	-3,437.83	-681.47	3,473.82	0.00	0.00	0.00
15,900.00	90.16	179.74	11,819.21	-3,537.82	-681.01	3,573.59	0.00	0.00	0.00
16,000.00	90.16	179.74	11,818.92	-3,637.82	-680.55	3,673.37	0.00	0.00	0.00
16,100.00	90.16	179.74	11,818.64	-3,737.82	-680.09	3,773.14	0.00	0.00	0.00
16,200.00	90.16	179.74	11,818.35	-3,837.82	-679.64	3,872.91	0.00	0.00	0.00
16,300.00	90.16	179.74	11,818.06	-3,937.82	-679.18	3,972.68	0.00	0.00	0.00
16,400.00	90.16	179.74	11,817.77	-4,037.82	-678.72	4,072.46	0.00	0.00	0.00
16,500.00	90.16	179.74	11,817.49	-4,137.82	-678.27	4,172.23	0.00	0.00	0.00
16,600.00	90.16	179.74	11,817.20	-4,237.81	-677.81	4,272.00	0.00	0.00	0.00
16,700.00	90.16	179.74	11,816.91	-4,337.81	-677.35	4,371.77	0.00	0.00	0.00
16,800.00	90.16	179.74	11,816.63	-4,437.81	-676.89	4,471.55	0.00	0.00	0.00
16,900.00	90.16	179.74	11,816.34	-4,537.81	-676.44	4,571.32	0.00	0.00	0.00
17,000.00	90.16	179.74	11,816.05	-4,637.81	-675.98	4,671.09	0.00	0.00	0.00
17,100.00	90.16	179.74	11,815.77	-4,737.81	-675.52	4,770.87	0.00	0.00	0.00
17,200.00	90.16	179.74	11,815.48	-4,837.81	-675.06	4,870.64	0.00	0.00	0.00
17,300.00	90.16	179.74	11,815.19	-4,937.80	-674.61	4,970.41	0.00	0.00	0.00
17,400.00	90.16	179.74	11,814.90	-5,037.80	-674.15	5,070.18	0.00	0.00	0.00
17,500.00	90.16	179.74	11,814.62	-5,137.80	-673.69	5,169.96	0.00	0.00	0.00
17,600.00	90.16	179.74	11,814.33	-5,237.80	-673.23	5,269.73	0.00	0.00	0.00
17,700.00	90.16	179.74	11,814.04	-5,337.80	-672.78	5,369.50	0.00	0.00	0.00
17,800.00	90.16	179.74	11,813.76	-5,437.80	-672.32	5,469.27	0.00	0.00	0.00
17,900.00	90.16	179.74	11,813.47	-5,537.80	-671.86	5,569.05	0.00	0.00	0.00
18,000.00	90.16	179.74	11,813.18	-5,637.79	-671.40	5,668.82	0.00	0.00	0.00
18,100.00	90.16	179.74	11,812.89	-5,737.79	-670.95	5,768.59	0.00	0.00	0.00
18,200.00	90.16	179.74	11,812.61	-5,837.79	-670.49	5,868.36	0.00	0.00	0.00
18,300.00	90.16	179.74	11,812.32	-5,937.79	-670.03	5,968.14	0.00	0.00	0.00
18,400.00	90.16	179.74	11,812.03	-6,037.79	-669.58	6,067.91	0.00	0.00	0.00
18,500.00	90.16	179.74	11,811.75	-6,137.79	-669.12	6,167.68	0.00	0.00	0.00
18,600.00	90.16	179.74	11,811.46	-6,237.79	-668.66	6,267.46	0.00	0.00	0.00
18,700.00	90.16	179.74	11,811.17	-6,337.78	-668.20	6,367.23	0.00	0.00	0.00
18,800.00	90.16	179.74	11,810.88	-6,437.78	-667.75	6,467.00	0.00	0.00	0.00
18,900.00	90.16	179.74	11,810.60	-6,537.78	-667.29	6,566.77	0.00	0.00	0.00
19,000.00	90.16	179.74	11,810.31	-6,637.78	-666.83	6,666.55	0.00	0.00	0.00
19,100.00	90.16	179.74	11,810.02	-6,737.78	-666.37	6,766.32	0.00	0.00	0.00
19,200.00	90.16	179.74	11,809.74	-6,837.78	-665.92	6,866.09	0.00	0.00	0.00
19,300.00	90.16	179.74	11,809.45	-6,937.77	-665.46	6,965.86	0.00	0.00	0.00
19,400.00	90.16	179.74	11,809.16	-7,037.77	-665.00	7,065.64	0.00	0.00	0.00
19,500.00	90.16	179.74	11,808.88	-7,137.77	-664.54	7,165.41	0.00	0.00	0.00
19,600.00	90.16	179.74	11,808.59	-7,237.77	-664.09	7,265.18	0.00	0.00	0.00
19,700.00	90.16	179.74	11,808.30	-7,337.77	-663.63	7,364.95	0.00	0.00	0.00
19,800.00	90.16	179.74	11,808.01	-7,437.77	-663.17	7,464.73	0.00	0.00	0.00
19,900.00	90.16	179.74	11,807.73	-7,537.77	-662.71	7,564.50	0.00	0.00	0.00
20,000.00	90.16	179.74	11,807.44	-7,637.76	-662.26	7,664.27	0.00	0.00	0.00
20,100.00	90.16	179.74	11,807.15	-7,737.76	-661.80	7,764.05	0.00	0.00	0.00
20,200.00	90.16	179.74	11,806.87	-7,837.76	-661.34	7,863.82	0.00	0.00	0.00
20,300.00	90.16	179.74	11,806.58	-7,937.76	-660.89	7,963.59	0.00	0.00	0.00
20,400.00	90.16	179.74	11,806.29	-8,037.76	-660.43	8,063.36	0.00	0.00	0.00
20,500.00	90.16	179.74	11,806.00	-8,137.76	-659.97	8,163.14	0.00	0.00	0.00
20,600.00	90.16	179.74	11,805.72	-8,237.76	-659.51	8,262.91	0.00	0.00	0.00
20,700.00	90.16	179.74	11,805.43	-8,337.75	-659.06	8,362.68	0.00	0.00	0.00
20,800.00	90.16	179.74	11,805.14	-8,437.75	-658.60	8,462.45	0.00	0.00	0.00
20,900.00	90.16	179.74	11,804.86	-8,537.75	-658.14	8,562.23	0.00	0.00	0.00
21,000.00	90.16	179.74	11,804.57	-8,637.75	-657.68	8,662.00	0.00	0.00	0.00

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well PLATINUM MDP1 34-3 FED COM 171H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=26.5' @ 3449.70ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=26.5' @ 3449.70ft
Site:	PLATINUM MDP1 34-3 FED COM	**North Reference:**	Grid
Well:	PLATINUM MDP1 34-3 FED COM 171H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
21,100.00	90.16	179.74	11,804.28	-8,737.75	-657.23	8,761.77	0.00	0.00	0.00
21,200.00	90.16	179.74	11,803.99	-8,837.75	-656.77	8,861.54	0.00	0.00	0.00
21,300.00	90.16	179.74	11,803.71	-8,937.75	-656.31	8,961.32	0.00	0.00	0.00
21,400.00	90.16	179.74	11,803.42	-9,037.74	-655.85	9,061.09	0.00	0.00	0.00
21,500.00	90.16	179.74	11,803.13	-9,137.74	-655.40	9,160.86	0.00	0.00	0.00
21,600.00	90.16	179.74	11,802.85	-9,237.74	-654.94	9,260.64	0.00	0.00	0.00
21,700.00	90.16	179.74	11,802.56	-9,337.74	-654.48	9,360.41	0.00	0.00	0.00
21,800.00	90.16	179.74	11,802.27	-9,437.74	-654.03	9,460.18	0.00	0.00	0.00
21,900.00	90.16	179.74	11,801.99	-9,537.74	-653.57	9,559.95	0.00	0.00	0.00
22,000.00	90.16	179.74	11,801.70	-9,637.74	-653.11	9,659.73	0.00	0.00	0.00
22,100.00	90.16	179.74	11,801.41	-9,737.73	-652.65	9,759.50	0.00	0.00	0.00
22,200.00	90.16	179.74	11,801.12	-9,837.73	-652.20	9,859.27	0.00	0.00	0.00
22,300.00	90.16	179.74	11,800.84	-9,937.73	-651.74	9,959.04	0.00	0.00	0.00
22,400.00	90.16	179.74	11,800.55	-10,037.73	-651.28	10,058.82	0.00	0.00	0.00
22,500.00	90.16	179.74	11,800.26	-10,137.73	-650.82	10,158.59	0.00	0.00	0.00
22,600.00	90.16	179.74	11,799.98	-10,237.73	-650.37	10,258.36	0.00	0.00	0.00
22,695.86	90.16	179.74	11,799.70	-10,333.58	-649.93	10,354.00	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (Platinum MDP1 - plan hits target center - Point	0.00	0.00	11,799.70	-10,333.58	-649.93	451,200.94	714,533.08	32° 14' 21.068361 N	103° 46' 23.380295
FTP (Platinum MDP1 - plan hits target center - Point	0.00	0.00	11,829.70	116.02	-697.72	461,649.93	714,485.29	32° 16' 4.469271 N	103° 46' 23.301910

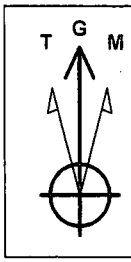
Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
4,765.00	4,765.00	0.00	0.00	Build 2.00°/100'
5,264.98	5,262.44	32.06	-29.42	Hold 10.00° Tangent
10,512.40	10,430.15	703.40	-645.48	Turn 2.00°/100'
11,444.46	11,356.24	681.91	-700.31	KOP, Build 10.00°/100'
12,246.11	11,829.70	116.02	-697.72	Landing Point
22,695.86	11,799.70	-10,333.58	-649.93	TD at 22695.86' MD

Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)
Site:	PLATINUM MDP1 34-3 FED COM
Well:	PLATINUM MDP1 34-3 FED COM 171H
Wellbore:	WB00
Design:	Permitting Plan

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level



Azimuths to Grid North
True North: -0.30°
Magnetic North: 6.58°

Magnetic Field
Strength: 48085.9snT
Dip Angle: 60.02°
Date: 3/28/2018
Model: HDGM

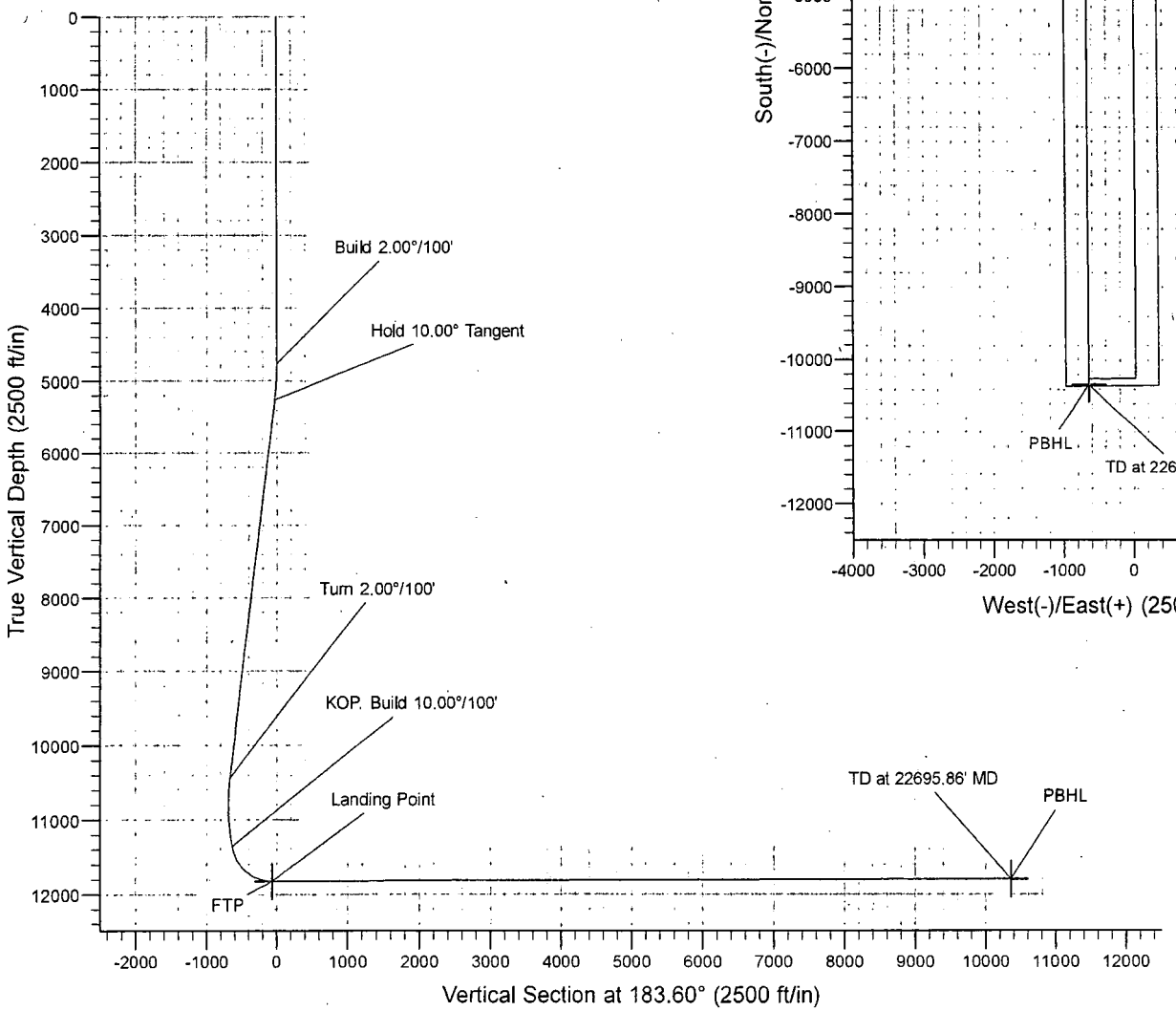
WELL DETAILS: PLATINUM MDP1 34-3 FED COM 171H

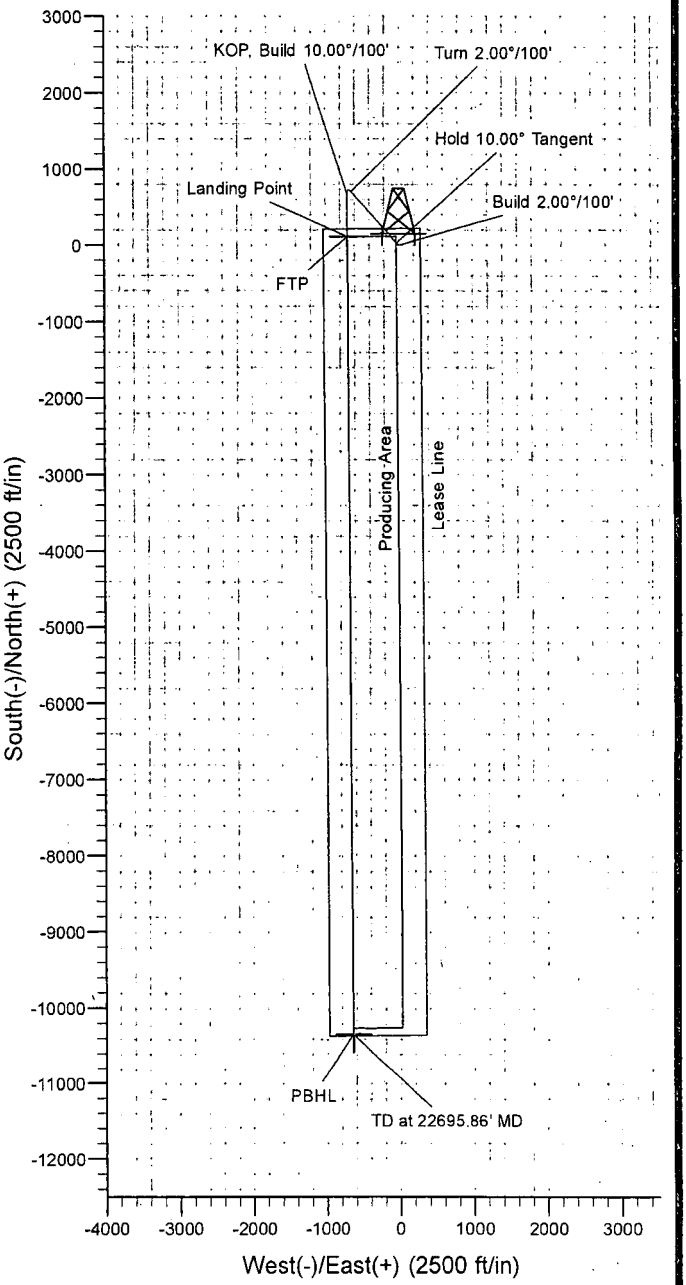
Ground Level: 3423.20

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	461533.92	715182.97	32° 16' 3.285181 N	103° 46' 15.183263 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4765.00	0.00	0.00	4765.00	0.00	0.00	0.00	0.00	0.00	Build 2.00°/100'
5264.98	10.00	317.46	5262.44	32.06	-29.42	2.00	317.46	-30.15	Hold 10.00° Tangent
10512.40	10.00	317.46	10430.15	703.40	-645.48	0.00	0.00	-661.50	Turn 2.00°/100'
11444.46	10.00	179.74	11356.24	681.91	-700.31	2.00	-158.56	-636.61	KOP, Build 10.00°/100'
12246.11	90.16	179.74	11829.70	116.02	-697.72	10.00	0.00	-71.99	Landing Point
22695.86	90.16	179.74	11799.70	-10333.58	-649.93	0.00	0.00	10354.00	TD at 22695.86' MD





Oxy USA Inc. - Platinum MDP1 34-3 Federal Com 171H

1. Geologic Formations

TVD of target	11829'	Pilot Hole Depth	N/A
MD at TD:	22695'	Deepest Expected fresh water:	532'

Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	532	
Salado	878	Brine
Castile	2,808	Brine
Lamar/Delaware	4,308	Brine
Bell Canyon	4,334	Oil/Gas
Cherry Canyon	5,228	Oil/Gas
Brushy Canyon	6,488	Losses
Bone Spring	8,152	Oil/Gas
1st Bone Spring	9,216	Oil/Gas
2nd Bone Spring	9,826	Oil/Gas
3rd Bone Spring	11,015	Oil/Gas
Wolfcamp	**11,477**	**Oil/Gas**

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size (in)	Casing Interval From (ft)	Casing Interval To (ft)	Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant Body SF Tension	Buoyant Joint SF Tension
17.5	0	582	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4358	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	11344	7.625	26.4	L-80 HC	SF (0 ft to 4000 ft) FJ (4000 ft to 11344 ft)	1.125	1.2	1.4	1.4
6.75	0	22695	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
							SF Values will meet or Exceed			

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

*Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage, we will drop a cancelation cone and not pump the second stage.

*Oxy requests the option to run production casing with DQX, SF TORQ, and/or DQW TORQ connections to accommodate hole conditions or drilling operations.

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	Y
If yes, are the first three strings cemented to surface?	Y
Is 2nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	619	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	931	12.9	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	226	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	355	12.9	1.92	10.410	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	869	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	582	100%
Intermediate (Lead)	0	3858	50%
Intermediate (Tail)	3858	4358	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6738	11344	5%
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6738	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10844	22695	20%

Offline Cementing

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
2. Land casing.
3. Fill pipe with kill weight fluid, and confirm well is static.
    a. If well is not static notify BLM and kill well.
    b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
4. Set and pressure test annular packoff.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed.

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange.
8. If well is not static notify BLM and kill well prior to cementing or nippling up for further remediation.
9. Install offline cement tool.
10. Rig up cement equipment.
    a. Notify BLM prior to cement job.
11. Perform cement job.
12. Confirm well is static and floats are holding after cement job.
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
8.5" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
6.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		10M	Blind Ram	✓	250 psi / 10000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		

*Specify if additional ram is utilized.

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see attached Well Control Plan.

Oxy will utilize a 5M annular with a 10M BOPE stack. The BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	Y	Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.	

BOP Break Testing Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	582	Water-Based Mud	8.6-8.8	40-60	N/C
582	4358	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4358	11344	Water-Based or Oil-Based Mud	8.0-9.6	38-50	N/C
11344	22695	Water-Based or Oil-Based Mud	9.5-12.0	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
No	Logs are planned based on well control or offset log information.
No	Drill stem test? If yes, explain
No	Coring? If yes, explain

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7382 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	175°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. • We plan to drill the two well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. • Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total estimated cuttings volume: 1716.3 bbls.

Attachments
_x__ Directional Plan
_x__ H2S Contingency Plan
_x__ Flex III Attachments
_x__ Spudder Rig Attachment
_x__ Premium Connection Specs

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Kaitlyn Daniels	Drilling Engineer	713-497-2104	512-424-9870
Margaret Giltner	Drilling Engineer Supervisor	713-366-5026	210-683-8480
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

Oxy Well Control Plan

A. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the >5M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Pilot hole and Lateral sections, 10M requirement

Component	OD	Preventer	RWP
Drillpipe	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
HWDP	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Drill collars and MWD tools	4-3/4" – 5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Mud Motor	4-3/4"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Production casing	5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
ALL	0" - 13-5/8"	Annular	5M
Open-hole	6-3/4"	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.
HWDP = Heavy Weight Drill Pipe
MWD = Measurement While Drilling

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The pressure at which control is swapped from the annular to another compatible ram will occur when the anticipated pressure is approaching or envisioned to exceed 70% of the 5M annular Rated Working Pressure (RWP) or 3500 PSI.

<u>General Procedure While Drilling</u>

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative

7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or expected to reach 70% of the annular RWP during kill operations, crew will reconfirm spacing and swap to the upper pipe ram

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following
    a. SIDPP and SICP
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan
    e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram

General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan.
    e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (The HCR and choke will already be in the closed position)
3. Confirm shut-in
4. Notify tool pusher/company representative

5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drill pipe thru the stack.
    a. Perform flow check, if flowing:
    b. Sound alarm (alert crew)
    c. Stab full opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper pipe ram
    e. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
    f. Confirm shut-in
    g. Notify tool pusher/company representative
    h. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
        iv. Regroup and identify forward plan

2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. Stab crossover and full opening safety valve and close
    c. Space out drill string with upset just beneath the compatible pipe ram
    d. Shut-in using compatible pipe ram. (The HCR and choke will already be in the closed position.)
    e. Confirm shut-in
    f. Notify tool pusher/company representative
    g. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
        iv. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario
    c. If impossible to pick up high enough to pull the string clear of the stack
    d. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
    e. Space out drill string with tool joint just beneath the upper pipe ram

f. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
g. Confirm shut-in
h. Notify tool pusher/company representative
i. Read and record the following:
    i. SIDPP and SICP
    ii. Pit gain
    iii. Time

j. Regroup and identify forward plan