District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 05 2015
RECEIVED

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

[1] Operator name and Address	[2] OGRID Number
OXY USA INC. P.O. BOX 50250 MIDLAND, TX 79710	16696
	[3] Reason for Filing Code/ Effective Date NW

[4] API Number	[5] Pool Name	[6] Pool Code
30 – 015-43076	CEDAR CANYON BONE SPRING	11520
[7] Property Code: 304798	[8] Property Name: CYPRESS 34 FEDERAL	[9] Well Number: 10H

II. [10] Surface Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
D	34	23S	29E		210	NORTH	330	WEST	EDDY

[11] Bottom Hole Location

TOP PERF- 716' FNL 393' FWL BOTTOM PERF- 428' FSL 558' FWL

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	34	23S	29E		148	SOUTH	554	WEST	EDDY

[12] Lse Code	[13] Producing Method Code : F	[14] Gas Connection Date: 9/29/15	[15] C-129 Permit Number	[16] C-129 Effective Date	[17] C-129 Expiration Date
F					

III. Oil and Gas Transporters

[18] Transporter OGRID	[19] Transporter Name and Address	[20] O/G/W
239284	OCCIDENTAL ENERGY TRANSPORTATION (BRIDGER LLC)	O
[redacted]		[redacted]
36785	DCP MIDSTREAM, LP	G
[redacted]		[redacted]
[redacted]		[redacted]
[redacted]		[redacted]

IV. Well Completion Data

[21] Spud Date	[22] Ready Date	[23] TD	[24] PBTD	[25] Perforations	[26] DHC, MC
8/7/15	9/20/15	13512'M 8749'V	13288'M 8759'V	13232-9089'	

[27] Hole Size	[28] Casing & Tubing Size	[29] Depth Set	[30] Sacks Cement
14-3/4"	10-3/4"	315'	430sx
9-7/8"	7-5/8"	3035'	1130sx
6-3/4"	5-1/2" X 4-1/2"	13496'	1070sx

V. Well Test Data

[31] Date New Oil	[32] Gas Delivery Date	[33] Test Date	[34] Test Length	[35] Tbg. Pressure	[36] Csg. Pressure
9/29/15	9/29/15	9/30/15	24 HRS.	---	650
[37] Choke Size	[38] Oil	[39] Water	[40] Gas		[41] Test Method
22/64	115	1159	451		F

[42] I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: JANA MENDIOLA

Title: REGULATORY COORDINATOR

E-mail Address: janalyn_mendiola@oxy.com

Date: 9/30/15

Phone: 432-685-5936

OIL CONSERVATION DIVISION

Approved by:

Title: Dist II Supervisor

Approval Date: 10-6-15

Pending BLM approvals will subsequently be reviewed and scanned

Provide signature page for Survey

NM OIL CONSERVATION
ARTESIA DISTRICT

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR OCT 05 2015
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM86024

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
CYPRESS 34 FEDERAL 10H

2. Name of Operator
OXY USA INC.
Contact: JANA MENDIOLA
E-Mail: janalyn_mendiola@oxy.com

9. API Well No.
30-015-43076

3a. Address
P.O. BOX 50250
MIDLAND, TX 79710

3b. Phone No. (include area code)
Ph: 432-685-5936
Fx: 432-685-5742

10. Field and Pool, or Exploratory
CEDAR CANYON BONE SPRING

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 34 T23S R29E NWNW 210FNL 330FWL
32.267892 N Lat, 103.979624 W Lon

11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

RU CTU 9/2/15, RIH & clean out to PBTD @ 13288', pressure test csg to 8700# for 30 min, good test.
RIH & perf @ 13232-13036, 12931-12725, 12628-12422, 12325-12119, 12022-11816, 11719-11513, 11416-11210, 11113-10907, 10810-10604, 10507-10301, 10204-9998, 9901-9695, 9598-9392, 9295-9089'
Total 504 holes. Frac in 14 stages w/ 780740g Slick Water + 27875g 7.5% HCl acid + 104528g WF115 + 2173648g YF115FlexD w/ 6275460# sand, RD Schlumberger 9/19/15. RIH & clean out, flow to clean up and test well for potential.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #318166 verified by the BLM Well Information System
For OXY USA INC., sent to the Carlsbad

Name *(Printed/Typed)* DAVID STEWART — Title SR. REGULATORY ADVISOR

Signature (Electronic Submission) — Date 09/30/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office _____

Pending BLM approvals will subsequently be reviewed and scanned

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfu... to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Schlumberger

Oxy Cypress 34 Federal 10H MWD 0ft-13512ft Survey Geodetic Report

(Def Survey)

Report Date:	August 28, 2015 - 11:25 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	OXY	**Vertical Section Azimuth:**	177.800 ° (Grid North)
Field:	NM Eddy County (NAD 27)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Oxy Cypress 34 Federal 10H / Oxy Cypress 34 Federal 10H	**TVD Reference Datum:**	RKB
Well:	Oxy Cypress 34 Federal 10H	**TVD Reference Elevation:**	3067.300 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3049.800 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.375 °
Survey Name:	Oxy Cypress 34 Federal 10H MWD 0ft-13512ft	**Total Gravity Field Strength:**	998.4657mgn (9.80665 Based)
Survey Date:	August 08, 2015	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	244.873 ° / 5248.025 ft / 6.296 / 0.598	**Total Magnetic Field Strength:**	48333.012 nT
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	60.135 °
Location Lat / Long:	N 32° 16' 4.41113", W 103° 58' 46.64901"	**Declination Date:**	August 08, 2015
Location Grid N/E Y/X:	N 461357.000 ftUS, E 609328.100 ftUS	**Magnetic Declination Model:**	HDGM 2015
CRS Grid Convergence Angle:	0.1888 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99992278	**Grid Convergence Used:**	0.1888 °
Version / Patch:	2.8.572.0	**Total Corr Mag North->Grid North:**	7.1857 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	461357.00	609328.10	N 32 16 4.41	W 103 58 46.65
Ground Level	17.50	0.00	0.00	17.50	0.00	0.00	0.00	0.00	461357.00	609328.10	N 32 16 4.41	W 103 58 46.65
	353.00	1.93	292.31	352.94	-2.34	2.14	-5.23	0.58	461359.14	609322.87	N 32 16 4.43	W 103 58 46.71
	477.00	0.79	144.64	476.92	-2.49	2.24	-6.66	2.12	461359.24	609321.44	N 32 16 4.43	W 103 58 46.73
	536.00	*0.18*	*113.03*	*535.91*	*-2.11*	*1.87*	*-6.34*	*1.09*	*461358.87*	*609321.76*	*N 32 16 4.43*	*W 103 58 46.72*
	718.00	0.26	119.86	717.91	-1.77	1.56	-5.72	0.05	461358.55	609322.38	N 32 16 4.43	W 103 58 46.72
	785.00	0.09	152.51	784.91	-1.65	1.43	-5.57	0.28	461358.43	609322.53	N 32 16 4.43	W 103 58 46.71
	974.00	0.18	201.56	973.91	-1.24	1.02	-5.61	0.07	461358.02	609322.49	N 32 16 4.42	W 103 58 46.71
	1037.00	0.09	247.55	1036.91	-1.13	0.91	-5.69	0.21	461357.91	609322.41	N 32 16 4.42	W 103 58 46.72
	1100.00	0.09	48.15	1099.91	-1.15	0.93	-5.70	0.28	461357.93	609322.40	N 32 16 4.42	W 103 58 46.72
	1225.00	0.18	150.67	1224.91	-1.03	0.82	-5.53	0.17	461357.82	609322.57	N 32 16 4.42	W 103 58 46.71
	1287.00	0.09	223.00	1286.91	-0.91	0.70	-5.51	0.28	461357.70	609322.59	N 32 16 4.42	W 103 58 46.71
	1413.00	0.18	273.28	1412.91	-0.86	0.64	-5.78	0.11	461357.64	609322.32	N 32 16 4.42	W 103 58 46.72
	1476.00	0.18	203.99	1475.91	-0.78	0.56	-5.92	0.32	461357.56	609322.18	N 32 16 4.42	W 103 58 46.72
	1539.00	0.18	204.69	1538.91	-0.61	0.38	-6.00	0.00	461357.38	609322.10	N 32 16 4.42	W 103 58 46.72
	1601.00	0.18	17.67	1600.91	-0.61	0.38	-6.01	0.58	461357.38	609322.09	N 32 16 4.42	W 103 58 46.72
	1727.00	0.09	113.63	1726.91	-0.75	0.53	-5.86	0.17	461357.53	609322.24	N 32 16 4.42	W 103 58 46.72
	1915.00	0.09	83.66	1914.91	-0.76	0.49	-5.58	0.02	461357.49	609322.52	N 32 16 4.42	W 103 58 46.71
	2103.00	0.09	19.88	2102.91	-0.85	0.64	-5.38	0.05	461357.64	609322.72	N 32 16 4.42	W 103 58 46.71
	2292.00	0.18	177.48	2291.91	-0.69	0.48	-5.32	0.14	461357.48	609322.78	N 32 16 4.42	W 103 58 46.71
	2418.00	0.26	99.48	2417.91	-0.43	0.24	-5.03	0.23	461357.24	609323.07	N 32 16 4.41	W 103 58 46.71
	2607.00	0.18	87.06	2606.91	-0.35	0.18	-4.31	0.05	461357.18	609323.79	N 32 16 4.41	W 103 58 46.70
	2794.00	*1.56*	*205.46*	*2793.89*	*1.93*	*-2.13*	*-5.12*	*0.89*	*461354.87*	*609322.98*	*N 32 16 4.39*	*W 103 58 46.71*
	2963.00	0.18	8.71	2962.87	3.73	-3.97	-6.08	1.04	461353.03	609322.02	N 32 16 4.37	W 103 58 46.72
	3106.00	0.09	184.49	3105.87	3.62	-3.86	-6.06	0.19	461353.14	609322.04	N 32 16 4.37	W 103 58 46.72
	3294.00	0.09	266.49	3293.87	3.77	-4.02	-6.22	0.06	461352.98	609321.88	N 32 16 4.37	W 103 58 46.72
	3483.00	0.09	172.88	3482.87	3.93	-4.17	-6.35	0.07	461352.83	609321.75	N 32 16 4.37	W 103 58 46.72
	3547.00	0.00	172.88	3546.87	3.98	-4.22	-6.34	0.14	461352.78	609321.76	N 32 16 4.37	W 103 58 46.72
	3736.00	0.09	190.79	3735.87	4.12	-4.37	-6.37	0.05	461352.63	609321.73	N 32 16 4.37	W 103 58 46.72
	3924.00	0.09	178.57	3923.87	4.41	-4.66	-6.39	0.01	461352.34	609321.71	N 32 16 4.37	W 103 58 46.72
	4112.00	0.09	110.23	4111.87	4.62	-4.86	-6.25	0.05	461352.14	609321.85	N 32 16 4.36	W 103 58 46.72
	4299.00	0.09	260.87	4298.87	4.69	-4.93	-6.26	0.09	461352.07	609321.84	N 32 16 4.36	W 103 58 46.72
	4424.00	0.09	275.54	4423.86	4.69	-4.94	-6.45	0.02	461352.06	609321.65	N 32 16 4.36	W 103 58 46.72
	4612.00	0.09	170.79	4611.86	4.82	-5.07	-6.58	0.08	461351.93	609321.52	N 32 16 4.36	W 103 58 46.73
	4801.00	0.00	170.79	4800.86	4.96	-5.22	-6.55	0.05	461351.78	609321.55	N 32 16 4.36	W 103 58 46.73
	4988.00	0.09	72.74	4987.86	4.92	-5.17	-6.41	0.05	461351.83	609321.69	N 32 16 4.36	W 103 58 46.72
	5176.00	0.09	37.83	5175.86	4.77	-5.01	-6.18	0.03	461351.99	609321.92	N 32 16 4.36	W 103 58 46.72
	5364.00	0.09	233.34	5363.86	4.74	-4.99	-6.21	0.09	461352.01	609321.89	N 32 16 4.36	W 103 58 46.72
	5551.00	0.09	202.94	5550.86	4.96	-5.21	-6.38	0.03	461351.79	609321.72	N 32 16 4.36	W 103 58 46.72
	5739.00	0.09	161.41	5738.86	5.23	-5.48	-6.39	0.03	461351.52	609321.71	N 32 16 4.36	W 103 58 46.72
	5926.00	*0.09*	*142.37*	*5925.86*	*5.50*	*-5.74*	*-6.26*	*0.02*	*461351.26*	*609321.84*	*N 32 16 4.35*	*W 103 58 46.72*
	6052.00	0.09	238.85	6051.86	5.62	-5.87	-6.28	0.11	461351.13	609321.82	N 32 16 4.35	W 103 58 46.72
	6240.00	0.09	98.70	6239.86	5.72	-5.97	-6.26	0.09	461351.03	609321.84	N 32 16 4.35	W 103 58 46.72
	6427.00	0.09	163.98	6426.86	5.89	-6.13	-6.08	0.05	461350.87	609322.02	N 32 16 4.35	W 103 58 46.72
	6491.00	4.56	194.06	6490.79	8.44	-8.70	-6.69	7.16	461348.30	609321.41	N 32 16 4.33	W 103 58 46.73
	6616.00	9.23	177.93	6614.85	23.35	-23.66	-7.57	3.94	461333.35	609320.53	N 32 16 4.18	W 103 58 46.74
	6648.00	7.56	159.65	6646.51	27.92	-28.20	-6.74	9.77	461328.81	609321.36	N 32 16 4.13	W 103 58 46.73
	6742.00	8.00	102.94	6739.78	35.51	-35.47	1.80	7.85	461321.53	609329.90	N 32 16 4.06	W 103 58 46.63
	6804.00	8.35	85.58	6801.16	36.46	-36.09	10.49	4.01	461320.92	609338.59	N 32 16 4.05	W 103 58 46.53
	6867.00	8.62	69.54	6863.48	34.81	-34.08	19.48	3.77	461322.92	609347.57	N 32 16 4.07	W 103 58 46.42
	6930.00	7.47	51.35	6925.86	30.89	-29.88	27.10	4.41	461327.13	609355.20	N 32 16 4.11	W 103 58 46.33
	7056.00	7.74	21.55	7050.80	18.26	-16.86	36.62	3.10	461340.14	609364.71	N 32 16 4.24	W 103 58 46.22
	7120.00	7.74	15.32	7114.22	10.20	-8.70	39.34	1.31	461348.30	609367.43	N 32 16 4.32	W 103 58 46.19
	7182.00	10.38	12.82	7175.44	0.82	0.78	41.68	4.30	461357.78	609369.78	N 32 16 4.42	W 103 58 46.16
	7245.00	10.02	358.18	7237.46	-10.14	11.79	42.77	4.14	461368.79	609370.86	N 32 16 4.53	W 103 58 46.15
	7308.00	10.73	355.65	7299.43	-21.48	23.12	42.15	1.34	461380.11	609370.24	N 32 16 4.64	W 103 58 46.16
	7371.00	10.82	358.41	7361.32	-33.26	34.88	41.54	0.83	461391.87	609369.63	N 32 16 4.75	W 103 58 46.16
	7434.00	10.64	3.73	7423.22	-44.95	46.59	41.75	1.60	461403.59	609369.85	N 32 16 4.87	W 103 58 46.16
	7497.00	9.23	7.76	7485.27	-55.72	57.40	42.81	2.49	461414.40	609370.91	N 32 16 4.98	W 103 58 46.15
	7559.00	8.18	9.56	*7546.56*	-64.93	66.68	*44.22*	*1.75*	*461423.67*	*609372.31*	*N 32 16 5.07*	*W 103 58 46.13*
	7622.00	6.60	5.39	7609.03	-72.91	74.70	45.30	2.65	461431.70	609373.40	N 32 16 5.15	W 103 58 46.12
	7685.00	4.66	17.36	7671.73	-78.91	80.75	46.41	3.58	461437.74	609374.50	N 32 16 5.21	W 103 58 46.11
	7748.00	4.84	55.54	7734.53	-82.74	84.70	49.36	4.93	461441.69	609377.46	N 32 16 5.25	W 103 58 46.07
	7810.00	5.72	91.60	7796.28	-83.93	86.09	54.61	5.44	461443.09	609382.70	N 32 16 5.26	W 103 58 46.01
	7873.00	9.67	92.00	7858.70	-83.34	85.82	63.04	6.27	461442.81	609391.13	N 32 16 5.26	W 103 58 45.91

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7935.00	5.45	87.22	7920.15	-82.98	85.78	71.19	6.88	461442.77	609399.28	N 32 16 5.26	W 103 58 45.82
	7997.00	1.06	98.19	7982.03	-82.91	85.84	74.70	7.12	461442.83	609402.79	N 32 16 5.26	W 103 58 45.78
	8095.00	0.26	235.93	8080.03	-82.63	85.59	75.41	1.29	461442.58	609403.50	N 32 16 5.26	W 103 58 45.77
	8145.00	0.44	254.21	8130.03	-82.53	85.47	75.13	0.42	461442.47	609403.22	N 32 16 5.25	W 103 58 45.77
	8175.00	2.46	193.73	8160.02	-81.88	84.82	74.87	7.59	461441.81	609402.96	N 32 16 5.25	W 103 58 45.77
	8207.00	6.68	185.40	8191.91	-79.37	82.29	74.53	13.32	461439.29	609402.62	N 32 16 5.22	W 103 58 45.78
	8238.00	10.99	181.94	8222.53	-74.64	77.54	74.26	14.00	461434.54	609402.35	N 32 16 5.18	W 103 58 45.78
	8269.00	15.04	181.91	8252.73	-67.67	70.57	74.02	13.06	461427.56	609402.12	N 32 16 5.11	W 103 58 45.78
	8300.00	19.26	183.20	8282.35	-58.57	61.44	73.60	13.67	461418.43	609401.70	N 32 16 5.02	W 103 58 45.79
	8332.00	22.77	185.47	8312.21	-47.17	50.00	72.72	11.26	461407.00	609400.81	N 32 16 4.90	W 103 58 45.80
	8362.00	25.68	187.01	8339.57	-35.00	37.77	71.37	9.93	461394.76	609399.47	N 32 16 4.78	W 103 58 45.82
	8394.00	27.79	186.74	8368.15	-20.79	23.48	69.65	6.60	461380.47	609397.75	N 32 16 4.64	W 103 58 45.84
	8424.00	29.81	186.53	8394.43	-6.50	9.12	67.98	6.74	461366.12	609396.08	N 32 16 4.50	W 103 58 45.86
	8456.00	30.42	184.99	8422.11	9.40	-6.85	66.37	3.08	461350.15	609394.47	N 32 16 4.34	W 103 58 45.88
	8487.00	*31.49*	*183.45*	*8448.70*	*25.24*	*-22.75*	*65.20*	*4.29*	*461334.25*	*609393.30*	*N 32 16 4.18*	*W 103 58 45.89*
	8517.00	33.15	184.44	8474.05	41.19	-38.75	64.10	5.81	461318.25	609392.19	N 32 16 4.03	W 103 58 45.90
	8580.00	36.67	189.78	8525.72	76.72	-74.49	59.56	7.39	461282.52	609387.66	N 32 16 3.67	W 103 58 45.96
	8642.00	44.32	190.17	8572.83	116.04	-114.11	52.58	12.35	461242.90	609380.68	N 32 16 3.28	W 103 58 46.04
	8705.00	50.47	189.08	8615.46	161.41	-159.80	44.86	9.84	461197.21	609372.95	N 32 16 2.83	W 103 58 46.13
	8768.00	56.81	182.53	8652.82	211.59	-210.22	39.85	13.08	461146.80	609367.95	N 32 16 2.33	W 103 58 46.19
	8831.00	62.08	176.41	8684.86	265.77	-264.41	40.43	11.83	461092.61	609368.53	N 32 16 1.79	W 103 58 46.19
	8894.00	69.82	174.76	8710.51	323.21	-321.72	44.88	12.52	461035.30	609372.98	N 32 16 1.23	W 103 58 46.14
	8960.00	76.46	174.76	8729.64	386.25	-384.58	50.65	10.06	460972.45	609378.74	N 32 16 0.60	W 103 58 46.07
	9022.00	77.21	174.68	8743.76	446.53	-444.70	56.20	1.22	460912.34	609384.30	N 32 16 0.01	W 103 58 46.01
	9085.00	80.02	172.59	8756.20	508.12	-506.07	63.05	5.52	460850.97	609391.15	N 32 15 59.40	W 103 58 45.93
	9148.00	83.10	170.80	8765.45	570.07	-567.72	72.06	5.64	460789.32	609400.15	N 32 15 58.79	W 103 58 45.83
	9211.00	86.35	172.01	8771.24	632.40	-629.74	81.43	5.50	460727.31	609409.52	N 32 15 58.18	W 103 58 45.72
	9274.00	89.52	173.08	8773.51	695.09	-692.16	89.60	5.31	460664.90	609417.69	N 32 15 57.56	W 103 58 45.63
	9337.00	91.54	173.79	8772.93	757.90	-754.74	96.80	3.40	460602.32	609424.89	N 32 15 56.94	W 103 58 45.55
	9400.00	91.19	173.51	8771.42	820.72	-817.34	103.76	0.71	460539.73	609431.86	N 32 15 56.32	W 103 58 45.47
	9463.00	91.28	173.35	8770.07	883.52	-879.91	110.97	0.29	460477.16	609439.06	N 32 15 55.70	W 103 58 45.39
	9526.00	91.36	174.11	8768.62	946.34	-942.51	117.85	1.21	460414.56	609445.94	N 32 15 55.08	W 103 58 45.31
	9589.00	91.36	174.91	8767.12	1009.22	-1005.21	123.87	1.27	460351.87	609451.96	N 32 15 54.46	W 103 58 45.24
	9652.00	91.28	174.77	8765.67	1072.12	-1067.93	129.54	0.26	460289.15	609457.63	N 32 15 53.84	W 103 58 45.18
	9714.00	91.63	174.65	8764.09	1134.01	-1129.65	135.25	0.60	460227.44	609463.34	N 32 15 53.23	W 103 58 45.12
	9777.00	92.59	175.47	8761.78	1196.89	-1192.37	140.68	2.00	460164.72	609468.76	N 32 15 52.61	W 103 58 45.06
	9840.00	93.47	176.61	8758.44	1259.77	-1255.13	145.02	2.28	460101.97	609473.11	N 32 15 51.99	W 103 58 45.01
	9903.00	93.21	177.42	8754.77	1322.66	-1317.94	148.30	1.35	460039.17	609476.38	N 32 15 51.36	W 103 58 44.97
	9966.00	92.51	180.09	8751.63	1385.57	-1380.84	149.66	4.38	459976.27	609477.75	N 32 15 50.74	W 103 58 44.96
	10028.00	91.80	181.17	8749.30	1447.45	-1442.79	148.98	2.08	459914.32	609477.07	N 32 15 50.13	W 103 58 44.97
	10154.00	91.01	182.97	8746.21	1573.05	-1568.66	144.43	1.56	459788.46	609472.52	N 32 15 48.88	W 103 58 45.03
	10284.00	89.25	181.10	8745.91	1702.69	-1698.57	139.81	1.98	459658.56	609467.90	N 32 15 47.60	W 103 58 45.09
	10346.00	90.13	181.39	8746.25	1764.57	-1760.56	138.47	1.49	459596.58	609466.56	N 32 15 46.99	W 103 58 45.10
	10471.00	89.08	180.26	8747.11	1889.39	-1885.54	136.67	1.23	459471.61	609464.76	N 32 15 45.75	W 103 58 45.13
	10597.00	88.55	180.01	8749.72	2015.26	-2011.51	136.37	0.47	459345.65	609464.46	N 32 15 44.50	W 103 58 45.14
	10722.00	86.88	180.83	8754.70	2140.02	-2136.40	135.46	1.49	459220.77	609463.55	N 32 15 43.27	W 103 58 45.15
	10848.00	85.30	181.08	8763.29	2265.54	-2262.08	133.36	1.27	459095.09	609461.45	N 32 15 42.02	W 103 58 45.18
	10911.00	85.30	180.31	8768.45	2328.24	-2324.87	132.60	1.22	459032.32	609460.69	N 32 15 41.40	W 103 58 45.19
	11019.00	*92.51*	*178.41*	*8770.52*	*2436.11*	*-2432.76*	*133.81*	*6.90*	*458924.43*	*609461.90*	*N 32 15 40.33*	*W 103 58 45.18*
	11143.00	92.51	177.71	8765.09	2559.99	-2556.57	138.00	0.56	458800.63	609466.09	N 32 15 39.11	W 103 58 45.14
	11267.00	93.03	177.87	8759.09	2683.84	-2680.34	142.78	0.44	458676.88	609470.87	N 32 15 37.88	W 103 58 45.09
	11391.00	92.51	178.12	8753.10	2807.70	-2804.12	147.11	0.47	458553.11	609475.20	N 32 15 36.66	W 103 58 45.04
	11517.00	91.54	181.60	8748.65	2933.51	-2930.02	147.42	2.87	458427.22	609475.50	N 32 15 35.41	W 103 58 45.04
	11643.00	91.01	178.04	8745.84	3059.38	-3055.96	147.81	2.86	458301.28	609475.90	N 32 15 34.17	W 103 58 45.05
	11768.00	91.10	177.28	8743.54	3184.36	-3180.84	152.92	0.61	458176.42	609481.00	N 32 15 32.93	W 103 58 44.99
	11893.00	89.87	176.85	8742.48	3309.34	-3305.67	159.32	1.04	458051.60	609487.40	N 32 15 31.70	W 103 58 44.92
	12017.00	89.87	175.73	8742.77	3433.30	-3429.40	167.34	0.90	457927.87	609495.43	N 32 15 30.47	W 103 58 44.83
	12143.00	90.84	175.54	8741.98	3559.21	-3555.03	176.93	0.78	457802.25	609505.01	N 32 15 29.23	W 103 58 44.73
	12268.00	87.67	177.34	8743.61	3684.14	-3679.76	184.69	2.92	457677.53	609512.77	N 32 15 27.99	W 103 58 44.64
	12392.00	86.70	178.36	8749.70	3807.99	-3803.52	189.34	1.13	457553.78	609517.42	N 32 15 26.77	W 103 58 44.59
	12517.00	88.46	178.95	8754.98	3932.85	-3928.37	192.27	1.48	457428.94	609520.35	N 32 15 25.53	W 103 58 44.56
	12641.00	87.49	178.33	8759.36	4056.76	-4052.26	195.21	0.93	457305.07	609523.29	N 32 15 24.31	W 103 58 44.53
	12766.00	90.04	177.69	8762.05	4181.72	-4177.14	199.55	2.10	457180.19	609527.63	N 32 15 23.07	W 103 58 44.49
	12890.00	90.04	176.96	8761.97	4305.72	-4301.00	205.33	0.59	457056.34	609533.42	N 32 15 21.84	W 103 58 44.42
	13016.00	90.22	175.49	8761.68	4431.66	-4426.73	213.63	1.18	456930.62	609541.71	N 32 15 20.60	W 103 58 44.33
	13141.00	90.92	175.29	8760.44	4556.55	-4551.32	223.68	0.58	456806.05	609551.76	N 32 15 19.37	W 103 58 44.22
	13267.00	90.84	179.09	8758.50	4682.50	-4677.13	229.85	3.02	456680.24	609557.93	N 32 15 18.12	W 103 58 44.15
	13393.00	92.59	182.41	8754.73	4808.26	-4803.04	228.20	2.98	456554.34	609556.29	N 32 15 16.88	W 103 58 44.18
Last Survey	13429.00	92.95	181.80	8752.99	4844.11	-4838.97	226.88	1.97	456518.41	609554.97	N 32 15 16.52	W 103 58 44.19
Proj to Bit	13512.00	92.95	181.80	8748.72	4926.80	-4921.82	224.28	0.00	456435.57	609552.36	N 32 15 15.70	W 103 58 44.23

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	17.500	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM-Depth Only	Original Borehole / Oxy Cypress 34 Federal 10H MWD 0ft-13512ft
	1	17.500	353.000	1/98.425	30.000	30.000	SLB_MWD-STD_HDGM	*Original Borehole / Oxy Cypress* 34 Federal 10H MWD 0ft-13512ft
	1	353.000	13512.000	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM	Original Borehole / Oxy Cypress 34 Federal 10H MWD 0ft-13512ft

Final PvA - Rev3

OXY

Schlumberger

Borehole:	Well:	Field:	Structure:
Original Borehole	Cypress 34 Federal 10H	NM Eddy County (NAD 27)	CanElson 46

Gravity & Magnetic Parameters — Model: HDGM 2015 | Dip: 66.135° | Date: 06-Aug-2015 | MagDec: 7.379° | FS: 48333.812nT | Gravity FS: 998.466mgn (9.80665 Based)

Surface Location — NAD27 New Mexico State Plane, Eastern Zone, US Feet — Lat: N 32 16 4.41 | Lon: W 103 58 46.65 | Northing: 461357.6US | Easting: 689328.1fUS | Grid Conv: 0.1889° | Scale Fact: 0.99992278

Miscellaneous — Slot: Cypress 34 Federal 10H | Plan: MWD 08-13512ft | TVD Ref: RKB(3467.38 above MSL)

Critical Points

Comments	Survey MD(ft)	Inclination(deg)	Azimuth(deg)	TVD(ft)	Sub-Sea TVD	VS(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Eastings(ftUS)	Northings(ftUS)	DLS(°/100ft)	Tool Face(deg)
Tie-In	3483.00	0.09	172.88	3482.87	415.57	3.93	-4.17	-6.35	N 32 16 4.370	W 103 58 46.723	689321.75	461352.83	0.07	8.71
PTB	3520.00	0.18	8.71	3519.87	452.57	3.90	-4.14	-6.34	N 32 16 4.370	W 103 58 46.723	689321.77	461352.86	0.72	8.71
Cherry Canyon	3918.44	0.18	8.71	3918.30	851.00	2.67	-2.91	-6.15	N 32 16 4.383	W 103 58 46.721	689321.95	461354.09	0.00	8.71
Brushy Canyon	5177.44	0.18	8.71	5177.30	2110.00	-1.21	1.00	-5.55	N 32 16 4.421	W 103 58 46.714	689322.55	461358.00	0.00	8.71
KOP - Backbuild 2°/100' DLS to 7° Inc	6500.15	0.18	8.71	6500.00	3432.70	-5.30	5.11	-4.92	N 32 16 4.462	W 103 58 46.706	689323.18	461362.11	0.00	0.82
1st Bone Spring	6768.88	5.54	33.86	6768.30	3701.00	-16.20	16.30	2.38	N 32 16 4.572	W 103 58 46.621	689330.48	461373.30	2.00	34.03
Hold 7° Inc	6842.84	7.00	34.03	6841.02	3773.72	-22.65	22.93	6.84	N 32 16 4.638	W 103 58 46.569	689334.94	461379.93	2.00	34.03
Drop 2°/100' DLS to Vertical	7657.09	7.00	34.03	7650.00	4582.70	-102.78	105.25	62.42	N 32 16 5.451	W 103 58 45.918	689390.52	461462.24	0.00	34.03
2nd Bone Spring	7899.24	2.16	34.03	7891.30	4824.00	-118.36	121.26	73.24	N 32 16 5.609	W 103 58 45.791	689401.33	461478.25	2.00	34.03
Hold Vertical	8007.09	0.00	34.03	7999.13	4931.83	-120.00	122.94	74.37	N 32 16 5.625	W 103 58 45.778	689402.47	461479.93	2.00	34.03
KOP - Build 10°/100' DLS Curve	8189.31	0.00	34.03	8181.34	5114.04	-120.00	122.94	74.37	N 32 16 5.625	W 103 58 45.778	689402.47	461479.93	0.00	178.70
Landing Point @ 90° Inc	9089.31	90.00	178.70	8754.30	5687.00	452.89	-449.87	87.34	N 32 15 59.957	W 103 58 45.649	689415.44	460907.17	10.00	
Oxy Cypress 34 Federal 10H PBHL	13546.97	90.00	178.70	8754.30	5687.00	4910.00	-4906.39	188.25	N 32 15 15.855	W 103 58 44.645	689516.34	456451.00	0.00