

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONSERVATION
ARTESIA DISTRICT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT

5. Lease Serial No.
NMNM81586

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
NMNM137568

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

8. Lease Name and Well No.
CEDAR CANYON 23 FEDERAL COM 6H

3. Address
MIDLAND, TX 79710

3a. Phone No. (include area code)
Ph: 432-685-5936

9. API Well No.
30-015-44095-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
Sec 22 T24S R29E Mer NMP
At surface NESE 2329FSL 1173FEL 32.202052 N Lat, 103.967549 W Lon
Sec 23 T24S R29E Mer NMP
At top prod interval reported below NWSW 2133FSL 359FWL 32.201416 N Lat, 103.962657 W Lon
Sec 24 T24S R29E Mer NMP
At total depth NESW 2175FSL 2434FWL 32.201438 N Lat, 103.938679 W Lon

10. Field and Pool, or Exploratory
PIERCE CROSSING-BONE SPRING, E

11. Sec., T., R., M., or Block and Survey
or Area Sec 22 T24S R29E Mer NMP

12. County or Parish
EDDY

13. State
NM

14. Date Spudded
04/30/2017

15. Date T.D. Reached
06/22/2017

16. Date Completed
☐ D & A ☒ Ready to Prod.
08/04/2017

17. Elevations (DF, KB, RT, GL)*
2949 GL

18. Total Depth: MD 17351
TVD 8974

19. Plug Back T.D.: MD 17290
TVD 8974

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
MUDLOG

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

①
②
③
④

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
5 14.750	10.750 J55	45.5	0	418		350	83	0	
6 6.750	5.500 P110	20.0	0	8181		875	257	8188	
9 9.875	7.625 L80	29.7	0	8348	3060	1870	817	150	
6 6.750	4.500 P110	13.5	8181	17341		875	257	8188	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING			9946 TO 17187	0.420	1480	ACTIVE
B) BONE SPRING 2ND	9946	17187				
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9946 TO 17187	11367090G SLICKWATER + 51912G 15% HCL ACID W/11118610# SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity
08/06/2017	08/21/2017	24	→	3460.0	7226.0	4318.0		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
64/64	SI	885.0	→	3460	7226	4318	2088	POW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/06/2017	08/21/2017	24	→	3460.0	7226.0	4318.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
64/64	SI	885.0	→	3460	7226	4318	2088	POW	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #388846 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Reclamation by Feb 4th, 2018

ACCEPTED FOR RECORD
MAR 1 2018
mustafa Hage
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
BELL CANYON	3187	3894	OIL, GAS, WATER	RUSTLER	313
CHERRY CANYON	3895	5087	OIL, GAS, WATER	SALADO	740
BRUSHY CANYON	5088	6738	OIL, GAS, WATER	CASTILE	1466
BONE SPRING	6739	7416	OIL, GAS, WATER	DELAWARE	3028
BONE SPRING 1ST	7417	8615	OIL, GAS, WATER	BELL CANYON	3187
BONE SPRING 2ND	8616	8974	OIL, GAS, WATER	CHERRY CANYON	3895
				BRUSHY CANYON	5088
				BONE SPRING	6739

32. Additional remarks (include plugging procedure):
52. FORMATION (LOG) MARKERS CONTD.

1ST BONE SPRING 7417'M
2ND BONE SPRING 8616'M

Logs were mailed 9/19/17.

Log Header, Directional Survey, As-Drilled Amended C-102 plat & WBD are attached.

33. Circle enclosed attachments:

- Electrical/Mechanical Logs (I full set req'd.)
- Geologic Report
- DST Report
- Directional Survey
- Sundry Notice for plugging and cement verification
- Core Analysis
- Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #388846 Verified by the BLM Well Information System.

For OXY USA INC, sent to the Carlsbad

Committed to AFMSS for processing by DUNCAN WHITLOCK on 11/02/2017 (18DW0006SE)

Name (please print) DAVID STEWART

Title SR REGULATORY ADVISOR

Signature (Electronic Submission)

Date 09/18/2017

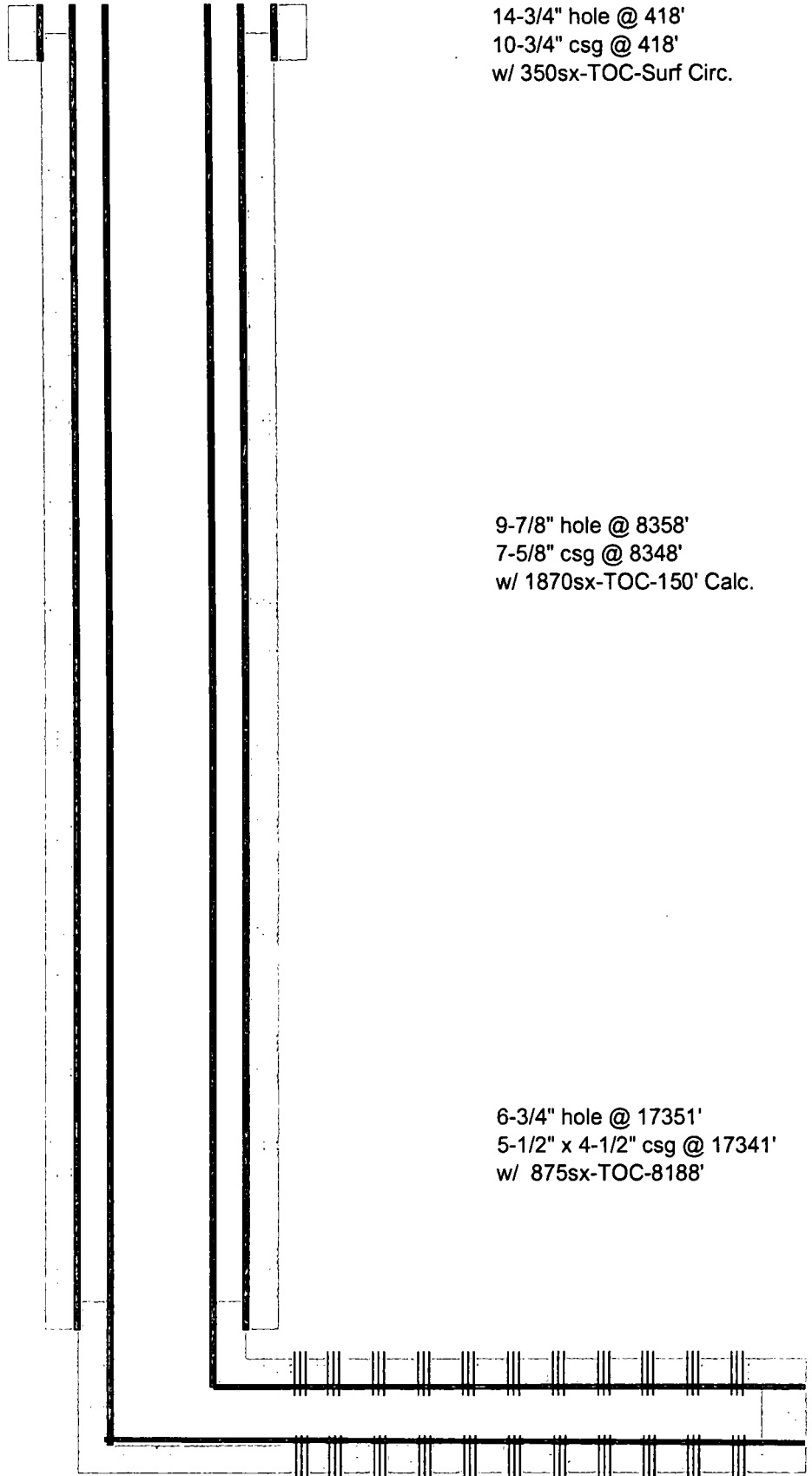
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Additional data for transaction #388846 that would not fit on the form

32. Additional remarks, continued

OXY' USA Inc.
Cedar Canyon 23 Federal Com 6H
API No. 30-015-44095



Perfs @ 9946-17187'

TD- 17351'M 8974'V

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Grande Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 08 2018

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

RECEIVED

☒ AMENDED REPORT
(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44095	Pool Code 96473	Pool Name Pierce Crossing Bone Spring, East
Property Code 317464	Property Name CEDAR CANYON "23" FEDERAL COM	Well Number 6H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 2948.7'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	22	24 SOUTH	29 EAST, N.M.P.M.		2329'	SOUTH	1173'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	24	24 SOUTH	29 EAST, N.M.P.M.		2100' 2175'	SOUTH	2400' 2434'	WEST	EDDY
Dedicated Acres 240	Joint or Infill Y	Consolidation Code	Order No.	TD - 2175' FSL 2434' FWL BP - 2171' FSL 2285' FWL TP - 2133' FSL 359' FWL					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>[Signature]</u> Date: <u>7/24/17</u> Printed Name: <u>Jana Mendiola</u> Business Address: <u>janalyn-mendiola@oxy.com</u>		SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from a series of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: <u>FEBRUARY 23, 2018</u> Signature and Seal of Professional Surveyor: <u>[Signature]</u> <u>9/15/2016</u> Certificate Number: <u>15079</u>	
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WELL LOCATION AND ACREAGE DEDICATION PLAT

GRID A2 = 89°43'55" 7723.73' IN ALL

GRID A2 = 100°40'41" 1228.20'

SURFACE LOCATION NEW MEXICO EAST NAD 1983
Y=437433.25 US FT
X=655447.20 US FT
LAT.: N 32.2020520°
LONG.: W 103.9675492°

TOP PERF. NEW MEXICO EAST NAD 1983
Y=437207.11 US FT
X=655591.13 US FT
LAT.: N 32.2014162°
LONG.: W 103.9626572°

BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1983
Y=437241.79 US FT
X=653404.78 US FT
LAT.: N 32.2014389°
LONG.: W 103.9386792°

KICK OFF POINT NEW MEXICO EAST NAD 1983
Y=437205.67 US FT
X=655684.13 US FT
LAT.: N 32.2014151°
LONG.: W 103.9636497°

BOTTOM PERF. NEW MEXICO EAST NAD 1983
Y=437241.09 US FT
X=653258.49 US FT
LAT.: N 32.2014385°
LONG.: W 103.9391618°

gyro/data

Gyrodata Incorporated
10504 WCR 72
Midland, TX 79707

Main: 432-561-8458
Fax: 432-563-7982

I, Kevin Willard, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Gyroscopic Multishot survey from a depth of 0 feet to a depth of 8192 feet conducted on the day(s) of 05/25/17 through 05/25/17; that this survey was conducted at the request OXY for the Cedar Canon 23 Federal Com Well 6H API No. 30-015-44095 in Eddy County, New Mexico; that the data is true, correct, complete, and within the limitations of the tool as set forth by Gyrodata Inc.; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Gyrodata Inc.



Kevin Willard
Operations Coordinator

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

June 23, 2017

OXY INC USA
5 Greenway Plaza, Suite 110
Houston, TX 77046

Re:

22, 24S, 29E, Eddy NM
N 32.20205 W -103.96755

CLIENT: OXY INC USA
WELL: Cedar Canyon 23 Federal Com 6H
FIELD: East Pierce Crossing (Bone Springs)

RIG: HP 617
COUNTY: Eddy
API NO: 30-015-44095
JOB NO: 17MLD1258

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Chris Heimann FE	Cedar Canyon 23 Federal Com 6H Original Hole	8458.00 Ft to 17310.00 Ft	June 19, 2017 to June 22, 2017	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Brian Nogues
Field Service Manager

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
22, 24S, 29E, Eddy NM
N 32.20205 W -103.96755

I, Chris Heimann certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of June 19, 2017 through June 22, 2017, conduct or supervise the taking of the SlimPulse surveys from a depth of 8458.00 feet to a depth of 17310.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY INC USA for the Cedar Canyon 23 Federal Com 6H Well (Original Hole) API No. 30-015-44095 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Chris Heimann
FE



Subscribed and Sworn to before me this _____ day of _____ (month) _____ (yr)

My Commission expires:

Notary Public

(signature)

(County State)

1	Originator
2	DE Sign Off Authority
3	D&M Line Manager
4	Client

Vertical Section (ft) Azim = 91.228° Scale = 1:400.00(ft) Origin = 0N/-S, 0E/-W

Schlumberger Survey Report

Friday June 23 2017 10: Report by MaxWell

-----General Information-----

Client : OXY USA INC. Well name : Cedar Canyon 23 Federal Com 6H
Field Eastern Zo US Feet

-----Survey Calculation Methods-----

Method for positions : Minimum Curvature Method

-----Job Location & Elevation-----

Latitude : 32.2021 degrees Longitude : -103.9676degrees
Permanent Datum : MSL Log Measured From : DF
Elevation of LMF from MSL : 2975.20 ft Elevation of TIP from MSL: 2975.20 ft
Depth Source :

-----Vertical Section Origin-----

Latitude (+N/S-) : 0.00 ft Departure (+E/W-) : 0.00 ft
Target Azimuth : 91.2300 degrees

-----MWD Survey Reference Criteria-----

-----Run1-----

Geomag Model:	: HDGM 2016	Calculation Date:	: 16-Jun-2017
Location G (Override):	998.47 mgn	Tolerance G	: 2.50 mgn
Location B (Override):	48121.37 nT	Tolerance B	: 300.00 nT
Magnetic Dip (Override):	60.04 degrees	Tolerance Dip	: 0.45 degrees

-----Run2-----

Geomag Model:	: HDGM 2016	Calculation Date:	: 16-Jun-2017
Location G (Override):	998.47 mgn	Tolerance G	: 2.50 mgn
Location B (Override):	48121.37 nT	Tolerance B	: 300.00 nT
Magnetic Dip (Override):	60.04 degrees	Tolerance Dip	: 0.45 degrees

-----MWD Survey Azimuth Correction-----

-----Run1-----

Magnetic dec (+E/W-) : 7.1230 degrees(Override)
Grid convergence (+E/W-) : 0.1949 degrees

GTotal az corr (+E/W-) : 6.9281 degrees

-----Run2-----

Magnetic dec (+E/W-) : 7.1230 degrees(Override)

Grid convergence (+E/W-) : 0.1949 degrees

GTotal az corr (+E/W-) : 6.9281 degrees

-----Survey Quality Index Description-----

0 : Long Survey passed all criteria 2 : Long Survey failed mag criteria
9 : Manual 28 : Tie-In Point

-----Survey Correction Index Description-----

0 : No Correction

-----Survey Description Index Description-----

0 : Not Flagged Survey

===== Survey List =====

MD (ft)	Incl (deg)	Azim (deg)	TVD (ft) /100ft)	V Sec (ft)	N/-S (ft)	E/-W (ft)	DLS (deg)	Run
0	0	0	0	0	0	0	0 -	
26.5	0	0	26.5	0	0	0	0	1
75.3	0.48	94.28	75.3	0.2	-0.02	0.2	0.98	1
164.1	0.89	82.58	164.09	1.26	0.05	1.26	0.49	1
254.2	1.02	84.78	254.18	2.75	0.21	2.75	0.15	1
343.9	1.44	55.95	343.86	4.46	0.91	4.48	0.82	1
432.6	1.56	59.76	432.53	6.4	2.15	6.45	0.18	1
521.7	1.5	59.31	521.6	8.42	3.35	8.5	0.07	1
612.5	1.03	59.53	612.38	10.13	4.37	10.22	0.52	1
704	0.05	348.59	703.87	10.82	4.83	10.92	1.11	1
796.2	0.06	266.37	796.07	10.76	4.86	10.87	0.08	1
888.2	0.06	265.11	888.07	10.66	4.86	10.77	0	1
978.7	0.06	273.33	978.57	10.57	4.86	10.68	0.01	1
1070.2	0.05	271.23	1070.07	10.48	4.86	10.59	0.01	1
1161.1	0.05	270.79	1160.97	10.4	4.86	10.51	0	1
1255.5	0.05	264.01	1255.37	10.32	4.86	10.43	0.01	1
1349.6	0.05	253.47	1349.47	10.24	4.84	10.35	0.01	1
1444	0.05	247.06	1443.87	10.16	4.81	10.27	0.01	1
1538	0.04	257.07	1537.87	10.1	4.79	10.2	0.01	1
1632.2	0.05	251.21	1632.07	10.02	4.77	10.13	0.01	1

1726.5	0.05	252.04	1726.37	9.95	4.74	10.05	0	1
1820.7	0.05	253.92	1820.57	9.87	4.72	9.97	0	1
1914.8	0.04	267.01	1914.67	9.8	4.71	9.9	0.02	1
2009.1	0.04	255.46	2008.97	9.73	4.7	9.84	0.01	1
2103.4	0.04	257.64	2103.27	9.67	4.68	9.77	0	1
2197.7	0.04	253.01	2197.57	9.61	4.66	9.71	0	1
2292.2	0.05	238.29	2292.07	9.54	4.63	9.64	0.02	1
2386.8	0.05	234.23	2386.67	9.47	4.59	9.57	0	1
2481.4	0.05	225.94	2481.27	9.41	4.53	9.51	0.01	1
2575.8	0.06	224.61	2575.67	9.35	4.47	9.45	0.01	1
2670.3	0.07	233.04	2670.17	9.27	4.4	9.36	0.01	1
2764.7	0.07	227.03	2764.57	9.18	4.33	9.28	0.01	1
2859.1	0.08	219.95	2858.97	9.1	4.24	9.19	0.01	1
2953.5	0.08	215.06	2953.37	9.02	4.13	9.11	0.01	1
3047.8	0.15	212.44	3047.67	8.92	3.97	9.01	0.07	1
3142.3	0.1	215.69	3142.17	8.81	3.8	8.89	0.05	1
3237	0.07	219.79	3236.87	8.73	3.69	8.81	0.03	1
3331.5	0.06	218.38	3331.37	8.66	3.61	8.74	0.01	1
3425.7	0.06	220.08	3425.57	8.6	3.53	8.68	0	1
3520	0.06	217.95	3519.87	8.54	3.46	8.62	0	1
3614.2	0.07	219.75	3614.07	8.47	3.37	8.55	0.01	1
3708.5	0.06	214.95	3708.37	8.41	3.29	8.48	0.01	1
3802.8	0.06	215.71	3802.67	8.36	3.21	8.43	0	1
3897.1	0.06	220.99	3896.97	8.3	3.13	8.36	0.01	1
3991.3	0.05	219.27	3991.17	8.24	3.06	8.31	0.01	1
4085.4	0.05	224.44	4085.27	8.19	3	8.25	0	1
4179.7	0.06	216.51	4179.57	8.13	2.93	8.19	0.01	1
4273.7	0.06	217.73	4273.57	8.07	2.85	8.13	0	1
4367.9	0.03	328.98	4367.77	8.03	2.83	8.09	0.08	1
4462.2	0.03	339.58	4462.07	8.01	2.88	8.07	0.01	1
4556.7	0.03	336.76	4556.57	7.99	2.92	8.05	0	1
4651	0.03	343.47	4650.87	7.97	2.97	8.03	0	1
4745.2	0.03	344.28	4745.07	7.95	3.02	8.02	0	1
4839.5	0.03	338.96	4839.37	7.94	3.06	8.01	0	1
4933.8	0.04	344.11	4933.67	7.92	3.12	7.99	0.01	1
5028	0.03	1.73	5027.87	7.91	3.18	7.98	0.02	1
5122.4	0.04	345.06	5122.27	7.9	3.23	7.97	0.02	1
5216.8	0.04	289.99	5216.67	7.86	3.28	7.93	0.04	1
5311.1	0.04	295.99	5310.97	7.8	3.3	7.87	0	1
5405.4	0.05	287.04	5405.27	7.73	3.33	7.8	0.01	1
5499.7	0.04	292.27	5499.57	7.66	3.35	7.73	0.01	1
5593.9	0.05	284.66	5593.77	7.59	3.37	7.66	0.01	1
5688.2	0.02	111.16	5688.07	7.56	3.38	7.64	0.07	1
5782.5	0.02	111.15	5782.37	7.6	3.37	7.67	0	1
5877.1	0.03	125.4	5876.97	7.63	3.35	7.7	0.01	1
5971.3	0.03	114.05	5971.17	7.67	3.32	7.75	0.01	1
6065.6	0.03	102.21	6065.47	7.72	3.31	7.79	0.01	1

6160	0.03	126.37	6159.87	7.77	3.29	7.84	0.01	1
6254.2	0.04	120.95	6254.07	7.81	3.26	7.89	0.01	1
6348.6	0.03	109.62	6348.47	7.87	3.23	7.94	0.01	1
6443	0.04	118.35	6442.87	7.92	3.21	7.99	0.01	1
6537.4	0.04	97.03	6537.27	7.98	3.19	8.05	0.02	1
6632	0.05	56.29	6631.87	8.05	3.21	8.12	0.03	1
6726.4	0.43	190.17	6726.27	8.03	2.88	8.09	0.49	1
6820.8	4.45	193.87	6820.56	7.17	-1.03	7.15	4.26	1
6915.1	8.2	196.35	6914.27	4.61	-11.03	4.38	3.99	1
7009.2	7.97	193.25	7007.44	1.51	-23.82	0.99	0.52	1
7103.4	4.48	156.07	7101.1	1.71	-33.55	0.99	5.48	1
7197.8	4.3	129.45	7195.23	6.06	-39.17	5.22	2.15	1
7292	5.87	120.35	7289.06	13.04	-43.85	12.1	1.87	1
7386.3	7.45	114.91	7382.72	22.85	-48.86	21.81	1.8	1
7480.7	8	106.48	7476.27	34.8	-53.3	33.66	1.33	1
7575.2	9.17	95.75	7569.72	48.65	-55.92	47.46	2.09	1
7669.4	11.35	95.6	7662.4	65.38	-57.58	64.15	2.31	1
7763.7	13.44	95.46	7754.5	85.56	-59.53	84.3	2.22	1
7858.1	16	94.65	7845.79	109.49	-61.62	108.19	2.72	1
7952.5	15.67	92.72	7936.61	135.22	-63.28	133.89	0.66	1
8046.9	13.96	88.38	8027.87	159.34	-63.57	158.01	2.16	1
8141.2	13.81	85.86	8119.42	181.91	-62.43	180.61	0.66	1
8192.8	14.56	83.4	8169.45	194.47	-61.24	193.19	1.86	1
8259	13.43	77.68	8233.68	210.18	-58.65	208.97	2.7	1
8458	14.95	109.79	8426.9	257.05	-62.41	255.77	3.98	1
8552	23.83	104.81	8515.49	287.06	-71.39	285.6	9.6	1
8647	29.12	96.07	8600.53	328.79	-78.74	327.18	6.9	1
8742	41.21	95.9	8678.05	383.22	-84.43	381.49	12.73	1
8836	51.37	94.76	8742.92	450.9	-90.67	449.06	10.84	1
8931	64.74	93.25	8793.08	531.24	-96.22	529.29	14.14	1
9025	77.17	95.89	8823.69	619.75	-103.36	617.68	13.48	1
9120	86.46	98.47	8837.21	713.17	-115.12	710.86	10.14	1
9228	86.7	97.85	8843.66	820.18	-130.42	817.57	0.61	2
9322	87.8	96.85	8848.17	913.54	-142.43	910.69	1.59	2
9417	89.38	93.04	8850.51	1008.29	-150.62	1005.29	4.33	2
9511	89.69	92.64	8851.27	1102.25	-155.28	1099.17	0.54	2
9606	89.45	93.16	8851.98	1197.21	-160.08	1194.05	0.6	2
9700	89.72	96.49	8852.66	1291.01	-167.98	1287.7	3.56	2
9795	89.62	96.2	8853.2	1385.63	-178.48	1382.11	0.32	2
9889	89.66	96.72	8853.79	1479.23	-189.06	1475.51	0.55	2
9984	89.76	96.43	8854.28	1573.82	-199.94	1569.89	0.33	2
10079	89.42	96.22	8854.96	1668.44	-210.4	1664.31	0.42	2
10173	89.76	95.62	8855.64	1762.12	-220.1	1757.8	0.73	2
10285	89.69	89.39	8856.18	1874.04	-225	1869.64	5.56	2
10362	89.83	88.56	8856.5	1950.98	-223.62	1946.62	1.1	2
10456	89.97	88.79	8856.67	2044.88	-221.44	2040.6	0.28	2
10551	89.17	88.06	8857.39	2139.76	-218.83	2135.56	1.13	2

10645	89.62	88.57	8858.37	2233.64	-216.07	2229.51	0.72	2
10740	87.21	85.47	8861	2328.33	-211.14	2324.33	4.13	2
10834	89.04	87.3	8864.07	2421.93	-205.22	2418.08	2.74	2
10929	89.62	88.1	8865.19	2516.75	-201.41	2513	1.04	2
11024	89.72	91.53	8865.73	2611.7	-201.11	2607.98	3.61	2
11119	89.17	93.06	8866.64	2706.68	-204.91	2702.9	1.71	2
11225	88.62	93.22	8868.68	2812.6	-210.72	2808.72	0.54	2
11308	86.35	93.82	8872.31	2895.45	-215.81	2891.48	2.83	2
11403	87.66	95.13	8877.27	2990.16	-223.21	2986.06	1.94	2
11497	87.56	92.77	8881.19	3083.97	-229.68	3079.75	2.5	2
11592	87.73	92.01	8885.1	3178.87	-233.64	3174.58	0.82	2
11687	87.52	91.55	8889.04	3273.78	-236.59	3269.45	0.53	2
11781	88.87	93.5	8892	3367.7	-240.73	3363.31	2.51	2
11876	89.93	92.56	8892.99	3462.65	-245.75	3458.17	1.5	2
11971	88.73	90.38	8894.11	3557.63	-248.18	3553.12	2.62	2
12065	88.49	90.11	8896.39	3651.59	-248.58	3647.1	0.38	2
12174	86.9	87.54	8900.78	3760.39	-246.34	3755.97	2.77	2
12259	88.35	87.34	8904.3	3845.13	-242.55	3840.81	1.72	2
12349	89.21	85.33	8906.22	3934.78	-236.8	3930.6	2.43	2
12444	89.07	85.33	8907.65	4029.27	-229.07	4025.28	0.14	2
12539	89.31	85.5	8908.98	4123.77	-221.47	4119.96	0.31	2
12633	90.17	87.51	8909.41	4217.44	-215.75	4213.78	2.33	2
12728	89.21	85.3	8909.92	4312.1	-209.79	4308.58	2.54	2
12832	89	88.74	8911.54	4415.79	-204.38	4412.42	3.32	2
12917	87.73	87.6	8913.97	4500.63	-201.67	4497.33	2.01	2
13012	88.04	88.7	8917.48	4595.42	-198.61	4592.22	1.2	2
13106	89.17	89.38	8919.76	4689.33	-197.03	4686.18	1.41	2
13201	89.14	89.42	8921.16	4784.27	-196.04	4781.16	0.05	2
13296	88.04	88.67	8923.5	4879.17	-194.45	4876.12	1.4	2
13390	89.48	88.58	8925.53	4973.04	-192.19	4970.06	1.54	2
13485	89.52	88.43	8926.35	5067.93	-189.7	5065.03	0.16	2
13579	90.14	88.96	8926.64	5161.84	-187.56	5159	0.87	2
13674	89.62	88.32	8926.84	5256.74	-185.31	5253.98	0.87	2
13777	89.52	88.31	8927.61	5359.61	-182.29	5356.93	0.1	2
13863	89.69	88.33	8928.2	5445.49	-179.77	5442.89	0.2	2
13958	89.62	88.36	8928.77	5540.37	-177.02	5537.85	0.08	2
14052	88.97	92.03	8929.93	5634.33	-177.34	5631.82	3.97	2
14147	87.35	91.51	8932.98	5729.28	-180.27	5726.73	1.79	2
14242	89.24	92.48	8935.81	5824.22	-183.57	5821.62	2.24	2
14336	88.83	91.94	8937.39	5918.19	-187.19	5915.54	0.72	2
14431	88.49	92.3	8939.61	6013.15	-190.71	6010.45	0.52	2
14525	89.97	92.82	8940.88	6107.12	-194.91	6104.34	1.67	2
14620	89.83	92.16	8941.05	6202.09	-199.04	6199.25	0.71	2
14715	89.62	92.63	8941.51	6297.07	-203.01	6294.16	0.54	2
14809	89.55	92.16	8942.19	6391.05	-206.95	6388.08	0.5	2
14904	89.55	92.06	8942.93	6486.04	-210.45	6483.01	0.11	2
14998	90.03	92.26	8943.27	6580.02	-213.98	6576.94	0.55	2

15093	89.35	91.15	8943.78	6675.02	-216.81	6671.9	1.37	2
15187	89.55	92.07	8944.68	6769.01	-219.44	6765.86	1	2
15282	89.55	88.34	8945.42	6863.97	-219.78	6860.84	3.92	2
15377	89.52	88.19	8946.19	6958.84	-216.9	6955.79	0.16	2
15471	88.69	88.22	8947.66	7052.7	-213.95	7049.73	0.88	2
15566	88.97	88.11	8949.6	7147.54	-210.91	7144.66	0.31	2
15660	88.97	88.22	8951.29	7241.39	-207.9	7238.6	0.11	2
15755	88.38	88.17	8953.49	7336.24	-204.9	7333.53	0.62	2
15849	89.41	87.92	8955.29	7430.07	-201.7	7427.45	1.13	2
15944	87.66	87.35	8957.72	7524.85	-197.79	7522.34	1.94	2
16039	88.11	88.05	8961.22	7619.6	-193.98	7617.2	0.87	2
16133	89.11	88.55	8963.51	7713.45	-191.2	7711.12	1.19	2
16228	89.48	87.9	8964.68	7808.31	-188.25	7806.07	0.8	2
16322	90	87.99	8965.1	7902.16	-184.87	7900.01	0.56	2
16417	89.97	88.51	8965.13	7997.03	-181.97	7994.96	0.55	2
16512	89.72	87.81	8965.39	8091.89	-178.92	8089.91	0.77	2
16607	89.42	88.93	8966.1	8186.77	-176.23	8184.87	1.22	2
16701	89.62	88.09	8966.89	8280.66	-173.78	8278.84	0.93	2
16796	90.1	87.97	8967.12	8375.51	-170.52	8373.78	0.52	2
16890	89.62	88.21	8967.34	8469.37	-167.38	8467.73	0.57	2
16985	88.31	88.31	8969.06	8564.22	-164.5	8562.67	1.38	2
17080	88.87	88.02	8971.39	8659.06	-161.46	8657.59	0.66	2
17174	89.62	87.94	8972.64	8752.9	-158.15	8751.52	0.81	2
17269	89.55	88	8973.32	8847.74	-154.79	8846.46	0.09	2
17310	89.62	88.19	8973.62	8888.68	-153.43	8887.43	0.51	2

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name 30015440950000_Cedar Canyon23FederalCom6H_ML_5INHorz_R

Location 2329' FSL x 1173' FEL. Sec 22, T24-S, R-29E

State New Mexico

County Eddy

Country USA

Rig Number H & P 617

API Number 30015440950000

Field Cedar Canyon

Spud Date 5/22/2017

Drilling Completed 6/22/2017

Surface Coordinates N 32.2019290°
W 103.9670616°

Well Hole Coordinates N 32.2013158°
W 103.9381924°

Ground Elevation 2,949'

K.B. Elevation 2,976'

Logged Interval 8358 To 17351

Total Depth 17351'

Formation 2nd Bone Spring Sand

Type of Drilling Fluid OBM