

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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.*5. Lease Serial No.
NMNM14124

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.8. Well Name and No.
MARQUARDT 1 FEDERAL 15H9. API Well No.
30-015-42471-00-X110. Field and Pool, or Exploratory
WILDCAT11. County or Parish, and State
EDDY COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
CIMAREX ENERGY COMPANY OF CO

Contact: PAULA BRUNSON

E-Mail: pbrunson@cimarex.com

3a. Address
600 NORTH MARIENFELD STREET SUITE 600
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-571-7848

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 1 T25S R26E SESW 200FSL 1650FWL
32.090847 N Lat, 104.145982 W Lon**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	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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.)

Cimarex respectfully requests permission to change the surface hole location for the above well by 100 ft due to gas lines near the pad:

Approved: 200 FSL 1650 FWL

Proposed: 200 FSL 1550 FWL

Please see attached C-102 and new directional plan.

NM OIL CONSERVATION
ARTESIA DISTRICT

JUL 23 2015

RECEIVED

OCD 7/30/15
Accepted for record
NMOCD

Eng Okay 5/26/15 CRW

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #302798 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Carlsbad Committed to AFMSS for processing by CHRISTOPHER WALLS on 05/26/2015 (15CRW0064SE)	
Name (Printed/Typed) PAULA BRUNSON	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 05/26/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

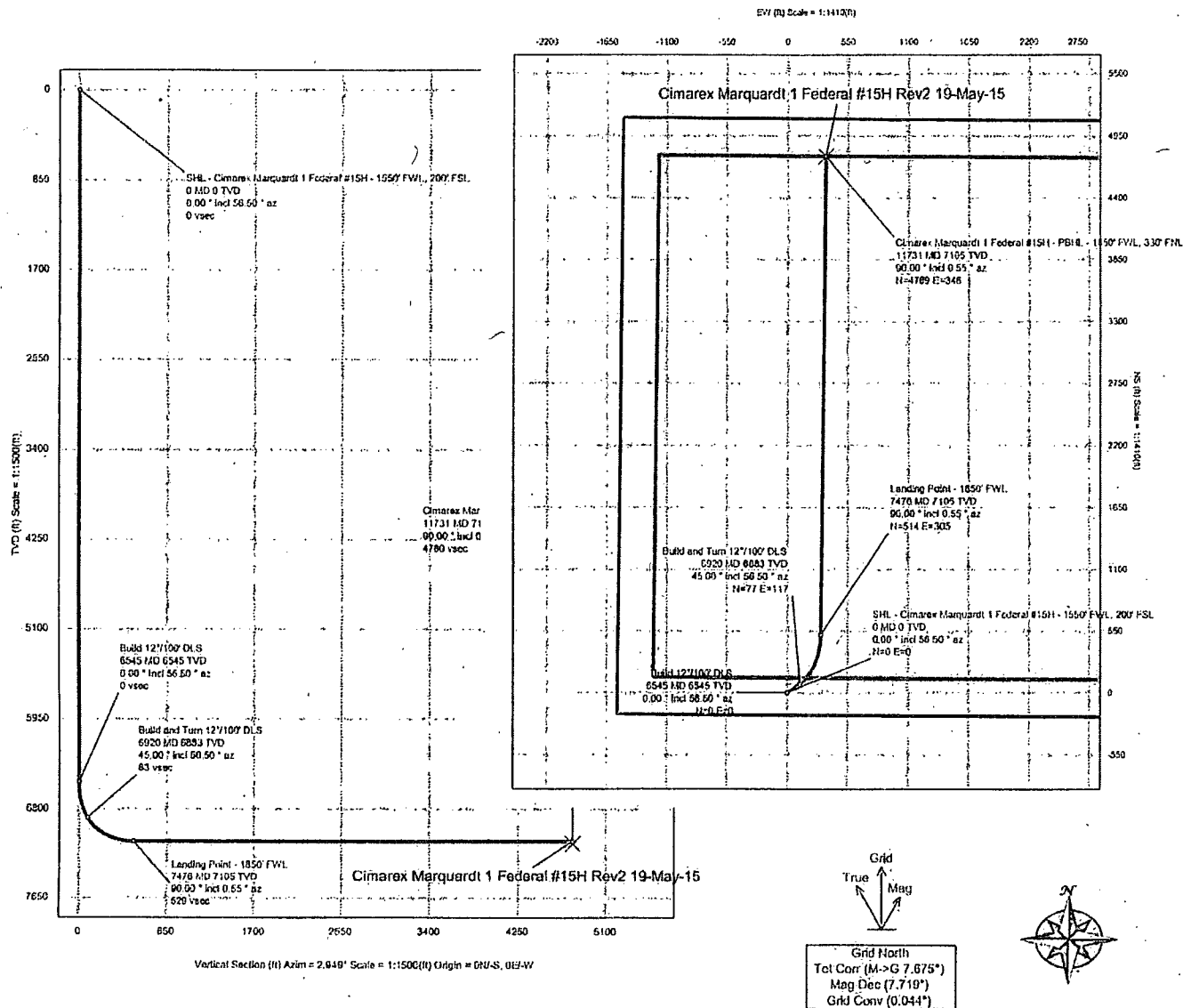
Approved By: <u>Raul Fernandez For Stephen Cathey</u>	Title: <u>AFM - Lands & Minerals</u>	Date: <u>7/16/2015</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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.

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

Borehole:	Well:	Field:	Structure:
Original Borehole	Marquardt 1 Federal #15H	NM Eddy County (NAD 83)	TBD

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: HDG18 2014 7.719° FS: 48299.866n Gravity FS: 990.685mgals (9.80665 m/s²)	NAD83 New Mexico State Plane, Eastern Zone, US Feet Lat: N 32 9 8.43 Northing: 419171.81US Grid Conv: 0.0442° Lon: W 104 15 0.20 Easting: 567042.31US Scale Fact: 0.99990985	Marquardt 1 Federal #15H TVD Ref: Ground Level (32820 above MSL) Plan: Cimarex Marquardt 1 Federal #15H Rev2 19-May-15



Critical Points							
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(°)S(°)	E(°)W(°)
SHL - Cimarex Marquardt 1 Federal #15H - 1550' FWL, 200' FSL	0.00	0.00	56.50	0.00	0.00	0.00	0.00
Build 12°/100' DLS	6545.20	0.00	56.50	6545.20	0.00	0.00	0.00
Build and Turn 12°/100' DLS	6620.20	45.00	56.50	6682.52	83.08	77.19	116.62
Landing Point - 1850' FWL	7478.05	90.00	0.55	7105.00	529.02	514.01	304.50
Cimarex Marquardt 1 Federal #15H - PSL - 1850' FWL, 330' FSL	11731.17	90.00	0.55	7105.00	4780.41	4780.94	345.73

CONTROLLED	
Plan ref	Cimarex Marquardt 1 Federal #15H Rev2 19-May-15
Drawing ref	
Copy number	of 3
Date	10-May-2015
1	Client
2	Client
3	Office
4	Office
Copy number for	



Cimarex Marquardt 1 Federal #15H Rev2 19-May-15 Proposal Geodetic Report (Non-Def Plan)



Report Date: May 19, 2015 - 05:47 PM
Client:
Field: NM Eddy County (NAD 83)
Structure / Slot: TBD / Marquardt 1 Federal #15H
Well: Marquardt 1 Federal #15H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Marquardt 1 Federal #15H Rev2 19-May-15
Survey Date: February 03, 2014
Tort / AHD / DDI / ERD Ratio: 111.677° / 4888.255 ft / 5.955 / 0.688
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 8.47703", W 104° 15' 0.98570"
Location Grid N/E Y/X: N 419171.900 ftUS, E 567042.300 ftUS
CRS Grid Convergence Angle: 0.0442°
Grid Scale Factor: 0.99990985
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 2:949° (Grid-North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground Level
TVD Reference Elevation: 3285.000 ft above MSL
Seabed / Ground Elevation: 3285.000 ft above MSL
Magnetic Declination: 7.719°
Total Gravity Field Strength: 998.6947 mgn (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 48259.566 nT
Magnetic Dip Angle: 59.930°
Declination Date: December 04, 2014
Magnetic Declination Model: HDGM 2014
North Reference: Grid North
Grid Convergence Used: 0.0442°
Total Corr Mag North -> Grid North: 7.6751°
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 ° ' ")
SHL - Cimarex Marquardt 1 Federal #15H - 1550' FWL, 200' FSL	0.00	0.00	56.50	0.00	0.00	0.00	0.00	N/A	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	100.00	0.00	56.50	100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	200.00	0.00	56.50	200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	300.00	0.00	56.50	300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	400.00	0.00	56.50	400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	500.00	0.00	56.50	500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	600.00	0.00	56.50	600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	700.00	0.00	56.50	700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	800.00	0.00	56.50	800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	900.00	0.00	56.50	900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1000.00	0.00	56.50	1000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1100.00	0.00	56.50	1100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1200.00	0.00	56.50	1200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1300.00	0.00	56.50	1300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1400.00	0.00	56.50	1400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1500.00	0.00	56.50	1500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1600.00	0.00	56.50	1600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1700.00	0.00	56.50	1700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1800.00	0.00	56.50	1800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	1900.00	0.00	56.50	1900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99

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 ° ' ")
	2000.00	0.00	56.50	2000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2100.00	0.00	56.50	2100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2200.00	0.00	56.50	2200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2300.00	0.00	56.50	2300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2400.00	0.00	56.50	2400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2500.00	0.00	56.50	2500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2600.00	0.00	56.50	2600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2700.00	0.00	56.50	2700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2800.00	0.00	56.50	2800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	2900.00	0.00	56.50	2900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3000.00	0.00	56.50	3000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3100.00	0.00	56.50	3100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3200.00	0.00	56.50	3200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3300.00	0.00	56.50	3300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3400.00	0.00	56.50	3400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3500.00	0.00	56.50	3500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3600.00	0.00	56.50	3600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3700.00	0.00	56.50	3700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3800.00	0.00	56.50	3800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	3900.00	0.00	56.50	3900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4000.00	0.00	56.50	4000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4100.00	0.00	56.50	4100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4200.00	0.00	56.50	4200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4300.00	0.00	56.50	4300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4400.00	0.00	56.50	4400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4500.00	0.00	56.50	4500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4600.00	0.00	56.50	4600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4700.00	0.00	56.50	4700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4800.00	0.00	56.50	4800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	4900.00	0.00	56.50	4900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5000.00	0.00	56.50	5000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5100.00	0.00	56.50	5100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5200.00	0.00	56.50	5200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5300.00	0.00	56.50	5300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5400.00	0.00	56.50	5400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5500.00	0.00	56.50	5500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5600.00	0.00	56.50	5600.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5700.00	0.00	56.50	5700.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5800.00	0.00	56.50	5800.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	5900.00	0.00	56.50	5900.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6000.00	0.00	56.50	6000.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6100.00	0.00	56.50	6100.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6200.00	0.00	56.50	6200.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6300.00	0.00	56.50	6300.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6400.00	0.00	56.50	6400.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6500.00	0.00	56.50	6500.00	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99

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 ° ' ")
Build 12°/100' DLS	6545.20	0.00	56.50	6545.20	0.00	0.00	0.00	0.00	419171.90	567042.30	N 32 9 8.48	W 104 15 0.99
	6600.00	6.58	56.50	6599.88	1.87	1.73	2.62	12.00	419173.63	567044.92	N 32 9 8.49	W 104 15 0.96
	6700.00	18.58	56.50	6697.30	14.78	13.73	20.74	12.00	419185.63	567063.04	N 32 9 8.61	W 104 15 0.74
	6800.00	30.58	56.50	6788.08	39.44	36.64	55.36	12.00	419208.54	567097.66	N 32 9 8.84	W 104 15 0.34
Build and Turn 12°/100' DLS	6900.00	42.58	56.50	6868.24	74.78	69.47	104.96	12.00	419241.37	567147.25	N 32 9 9.16	W 104 14 59.76
	6920.20	45.00	56.50	6882.82	83.08	77.19	116.62	12.00	419249.08	567158.91	N 32 9 9.24	W 104 14 59.63
	7000.00	49.72	45.16	6936.96	122.48	114.31	161.83	12.00	419286.20	567204.11	N 32 9 9.61	W 104 14 59.10
	7100.00	56.94	33.19	6996.78	187.18	176.50	212.00	12.00	419348.39	567254.28	N 32 9 10.22	W 104 14 58.52
Landing Point - 1850' FWL	7200.00	65.12	23.14	7045.27	266.24	253.56	252.91	12.00	419425.44	567295.19	N 32 9 10.98	W 104 14 58.04
	7300.00	73.89	14.39	7080.30	356.23	342.13	282.79	12.00	419514.00	567325.06	N 32 9 11.86	W 104 14 57.69
	7400.00	82.99	6.40	7100.35	453.20	438.33	300.32	12.00	419610.19	567342.60	N 32 9 12.81	W 104 14 57.49
	7476.05	90.00	0.55	7105.00	529.02	514.01	304.90	12.00	419685.87	567347.18	N 32 9 13.56	W 104 14 57.43
	7500.00	90.00	0.55	7105.00	552.95	537.96	305.13	0.00	419709.81	567347.41	N 32 9 13.80	W 104 14 57.43
	7600.00	90.00	0.55	7105.00	652.86	637.96	306.09	0.00	419809.80	567348.37	N 32 9 14.79	W 104 14 57.42
	7700.00	90.00	0.55	7105.00	752.78	737.95	307.05	0.00	419909.79	567349.32	N 32 9 15.78	W 104 14 57.41
	7800.00	90.00	0.55	7105.00	852.69	837.95	308.01	0.00	420009.77	567350.28	N 32 9 16.77	W 104 14 57.40
	7900.00	90.00	0.55	7105.00	952.60	937.95	308.97	0.00	420109.76	567351.24	N 32 9 17.76	W 104 14 57.38
	8000.00	90.00	0.55	7105.00	1052.51	1037.94	309.93	0.00	420209.75	567352.20	N 32 9 18.75	W 104 14 57.37
	8100.00	90.00	0.55	7105.00	1152.43	1137.94	310.89	0.00	420309.73	567353.16	N 32 9 19.73	W 104 14 57.36
	8200.00	90.00	0.55	7105.00	1252.34	1237.93	311.85	0.00	420409.72	567354.12	N 32 9 20.72	W 104 14 57.35
	8300.00	90.00	0.55	7105.00	1352.25	1337.93	312.81	0.00	420509.70	567355.08	N 32 9 21.71	W 104 14 57.34
	8400.00	90.00	0.55	7105.00	1452.16	1437.92	313.77	0.00	420609.69	567356.04	N 32 9 22.70	W 104 14 57.32
	8500.00	90.00	0.55	7105.00	1552.07	1537.92	314.73	0.00	420709.68	567357.00	N 32 9 23.69	W 104 14 57.31
	8600.00	90.00	0.55	7105.00	1651.99	1637.91	315.69	0.00	420809.66	567357.96	N 32 9 24.68	W 104 14 57.30
	8700.00	90.00	0.55	7105.00	1751.90	1737.91	316.65	0.00	420909.65	567358.92	N 32 9 25.67	W 104 14 57.29
	8800.00	90.00	0.55	7105.00	1851.81	1837.90	317.61	0.00	421009.63	567359.88	N 32 9 26.66	W 104 14 57.27
	8900.00	90.00	0.55	7105.00	1951.72	1937.90	318.57	0.00	421109.62	567360.84	N 32 9 27.65	W 104 14 57.26
	9000.00	90.00	0.55	7105.00	2051.64	2037.90	319.53	0.00	421209.61	567361.80	N 32 9 28.64	W 104 14 57.25
	9100.00	90.00	0.55	7105.00	2151.55	2137.89	320.49	0.00	421309.59	567362.76	N 32 9 29.63	W 104 14 57.24
	9200.00	90.00	0.55	7105.00	2251.46	2237.89	321.45	0.00	421409.58	567363.72	N 32 9 30.62	W 104 14 57.23
	9300.00	90.00	0.55	7105.00	2351.37	2337.88	322.41	0.00	421509.57	567364.68	N 32 9 31.61	W 104 14 57.21
	9400.00	90.00	0.55	7105.00	2451.29	2437.88	323.36	0.00	421609.55	567365.63	N 32 9 32.60	W 104 14 57.20
	9500.00	90.00	0.55	7105.00	2551.20	2537.87	324.32	0.00	421709.54	567366.59	N 32 9 33.59	W 104 14 57.19
	9600.00	90.00	0.55	7105.00	2651.11	2637.87	325.28	0.00	421809.52	567367.55	N 32 9 34.58	W 104 14 57.18
	9700.00	90.00	0.55	7105.00	2751.02	2737.86	326.24	0.00	421909.51	567368.51	N 32 9 35.57	W 104 14 57.17
	9800.00	90.00	0.55	7105.00	2850.93	2837.86	327.20	0.00	422009.50	567369.47	N 32 9 36.56	W 104 14 57.15
	9900.00	90.00	0.55	7105.00	2950.85	2937.85	328.16	0.00	422109.48	567370.43	N 32 9 37.55	W 104 14 57.14
	10000.00	90.00	0.55	7105.00	3050.76	3037.85	329.12	0.00	422209.47	567371.39	N 32 9 38.53	W 104 14 57.13
	10100.00	90.00	0.55	7105.00	3150.67	3137.84	330.08	0.00	422309.46	567372.35	N 32 9 39.52	W 104 14 57.12
	10200.00	90.00	0.55	7105.00	3250.58	3237.84	331.04	0.00	422409.44	567373.31	N 32 9 40.51	W 104 14 57.11
	10300.00	90.00	0.55	7105.00	3350.50	3337.84	332.00	0.00	422509.43	567374.27	N 32 9 41.50	W 104 14 57.09
	10400.00	90.00	0.55	7105.00	3450.41	3437.83	332.96	0.00	422609.41	567375.23	N 32 9 42.49	W 104 14 57.08
	10500.00	90.00	0.55	7105.00	3550.32	3537.83	333.92	0.00	422709.40	567376.19	N 32 9 43.48	W 104 14 57.07
	10600.00	90.00	0.55	7105.00	3650.23	3637.82	334.88	0.00	422809.39	567377.15	N 32 9 44.47	W 104 14 57.06
	10700.00	90.00	0.55	7105.00	3750.15	3737.82	335.84	0.00	422909.37	567378.11	N 32 9 45.46	W 104 14 57.05

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 ° ' ")
	10800.00	90.00	0.55	7105.00	3850.06	3837.81	336.80	0.00	423009.35	567379.07	N 32 9 46.45	W 104 14 57.03
	10900.00	90.00	0.55	7105.00	3949.97	3937.81	337.76	0.00	423109.34	567380.03	N 32 9 47.44	W 104 14 57.02
	11000.00	90.00	0.55	7105.00	4049.88	4037.80	338.72	0.00	423209.33	567380.99	N 32 9 48.43	W 104 14 57.01
	11100.00	90.00	0.55	7105.00	4149.79	4137.80	339.68	0.00	423309.32	567381.94	N 32 9 49.42	W 104 14 57.00
	11200.00	90.00	0.55	7105.00	4249.71	4237.79	340.64	0.00	423409.30	567382.90	N 32 9 50.41	W 104 14 56.99
	11300.00	90.00	0.55	7105.00	4349.62	4337.79	341.59	0.00	423509.29	567383.86	N 32 9 51.40	W 104 14 56.97
	11400.00	90.00	0.55	7105.00	4449.53	4437.78	342.55	0.00	423609.28	567384.82	N 32 9 52.39	W 104 14 56.96
	11500.00	90.00	0.55	7105.00	4549.44	4537.78	343.51	0.00	423709.26	567385.78	N 32 9 53.38	W 104 14 56.95
	11600.00	90.00	0.55	7105.00	4649.36	4637.78	344.47	0.00	423809.25	567386.74	N 32 9 54.37	W 104 14 56.94
	11700.00	90.00	0.55	7105.00	4749.27	4737.77	345.43	0.00	423909.23	567387.70	N 32 9 55.36	W 104 14 56.92
Cimarex Marquardt 1 Federal #15H - PBHL - 1850' FWL, 330' FNL	11731.17	90.00	0.55	7105.00	4780.41	4768.94	345.73	0.00	423940.40	567388.00	N 32 9 55.66	W 104 14 56.92

Survey Type: Non-Def Plan

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	11731.170	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Marquardt 1 Federal #15H Rev2

Well and Notice Remarks

Doc. Number	Doc. Type	Case IID	Type	Name
15CRW0064SE	APDCH	NMNM14124	311211	MARQUART FEDERAL
API	Well Name	Number	Operator	
300154247100X1	MARQUARDT 1 FEDERAL	15H	CIMAREX ENERGY COMPANY OF CO	
Doc. Number	Date	Author	Subject	Category
15CRW0064SE	07/06/2015	DEBORAH MCKINNEY	APDCH	APPROVAL
15CRW0064SE	05/26/2015	CHRISTOPHER WALLS	APDCH	APPROVAL

Category APPROVAL

Date 07/06/2015

rejected per email from NRS Chad Young, operator to resubmit sundry

17-Jul-2015 11:05