

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Serial No. NMNM114350
2. Name of Operator CIMAREX ENERGY COMPANY OF CO		6. If Indian, Allottee or Tribe Name
3a. Address 202 S CHEYENNE AVE SUITE 1000 TULSA, OK 74103.4346		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 432-620-1936		8. Well Name and No. MEDWICK 32 FEDERAL COM 8H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 32 T26S R27E Lot 2 0290FSL 2030FEL 32.000218 N Lat, 104.123489 W Lon		9. API Well No. 30-015-42173-00-X1
		10. Field and Pool, or Exploratory WILDCAT
		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	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 recomple 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 Energy respectfully request a approval to change the landing point, directional plan and first take point for the Medwick 32 Federal Com #8H well.

A SHL change was approved on 1/20/16 and a revised directional plan was submitted, however, the proposed directional would have stranded acreage on the S2S2 of Sec. 32.

Please see attached revised directional plan and C102 for your review and approval.

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 30 2016

RECEIVED

Accepted For Record
NMOCD

NSP pending

14. I hereby certify that the foregoing is true and correct. Electronic Submission #349463 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Carlsbad Committed to AFMSS for processing by CHARLES NIMMER on 08/30/2016 (16CN0022SE)	
Name (Printed/Typed) TERRI STATHEM	Title MANAGER REGULATORY COMPLIANCE
Signature (Electronic Submission)	Date 08/30/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER	Title PETROLEUM ENGINEER	Date 08/30/2016
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 Carlsbad		

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 ****

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-0720
District III
1000 Rio Breros 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) 476-3660 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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-42173		² Pool Code 98018		³ Pool Name Wildcat; Bone Spring	
⁴ Property Code 40451		⁵ Property Name MEDWICK 32 FEDERAL COM		⁶ Well Number 8H	
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.		⁹ Elevation 3192'	

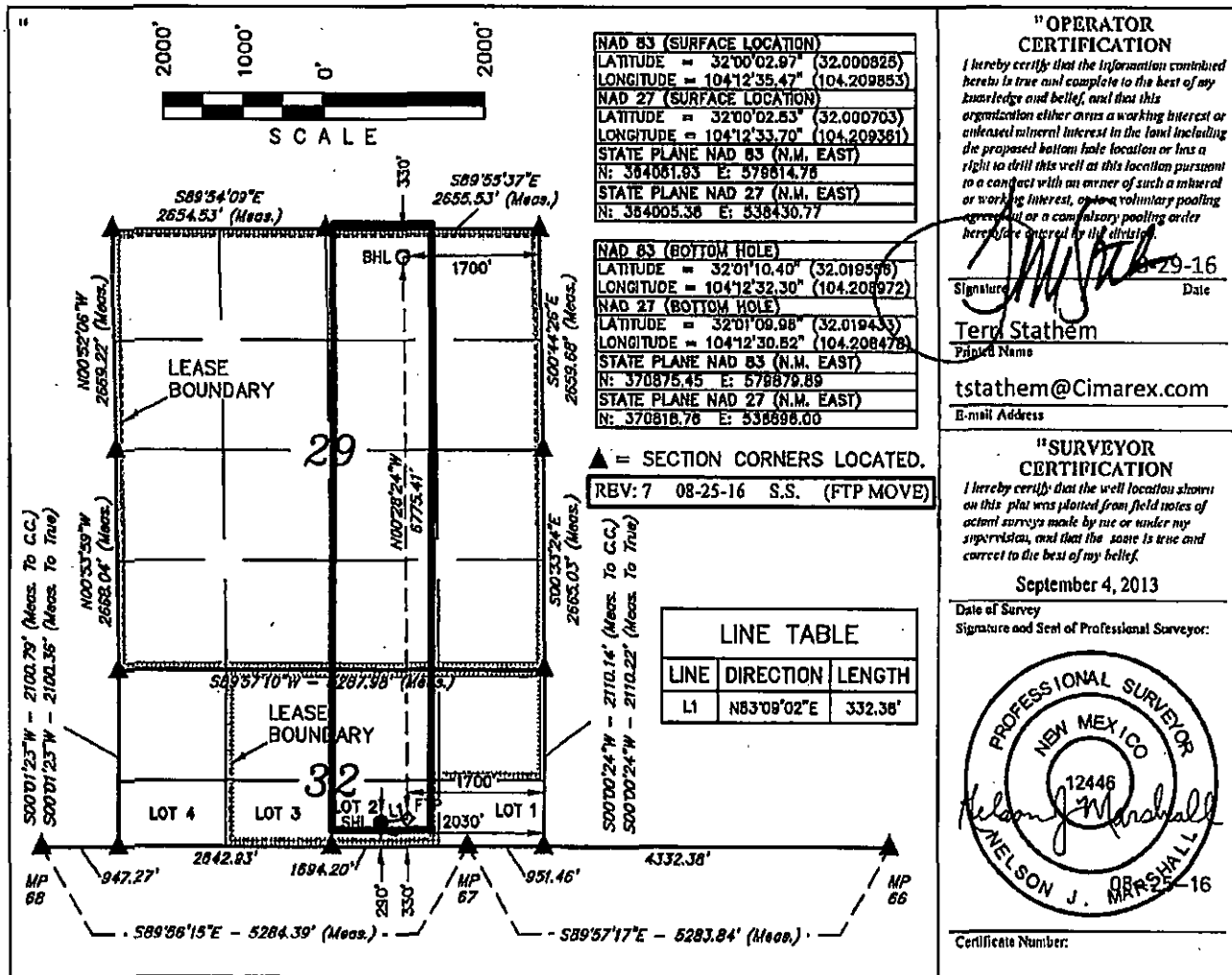
"Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	32	26S	27E		290	SOUTH	2030	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
B	29	26S	27E		330	NORTH	1700	EAST	EDDY
¹⁰ Dedicated Acres 223.32		¹¹ Joint or Infill		¹² Consolidation Code		¹³ Order No.			

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.



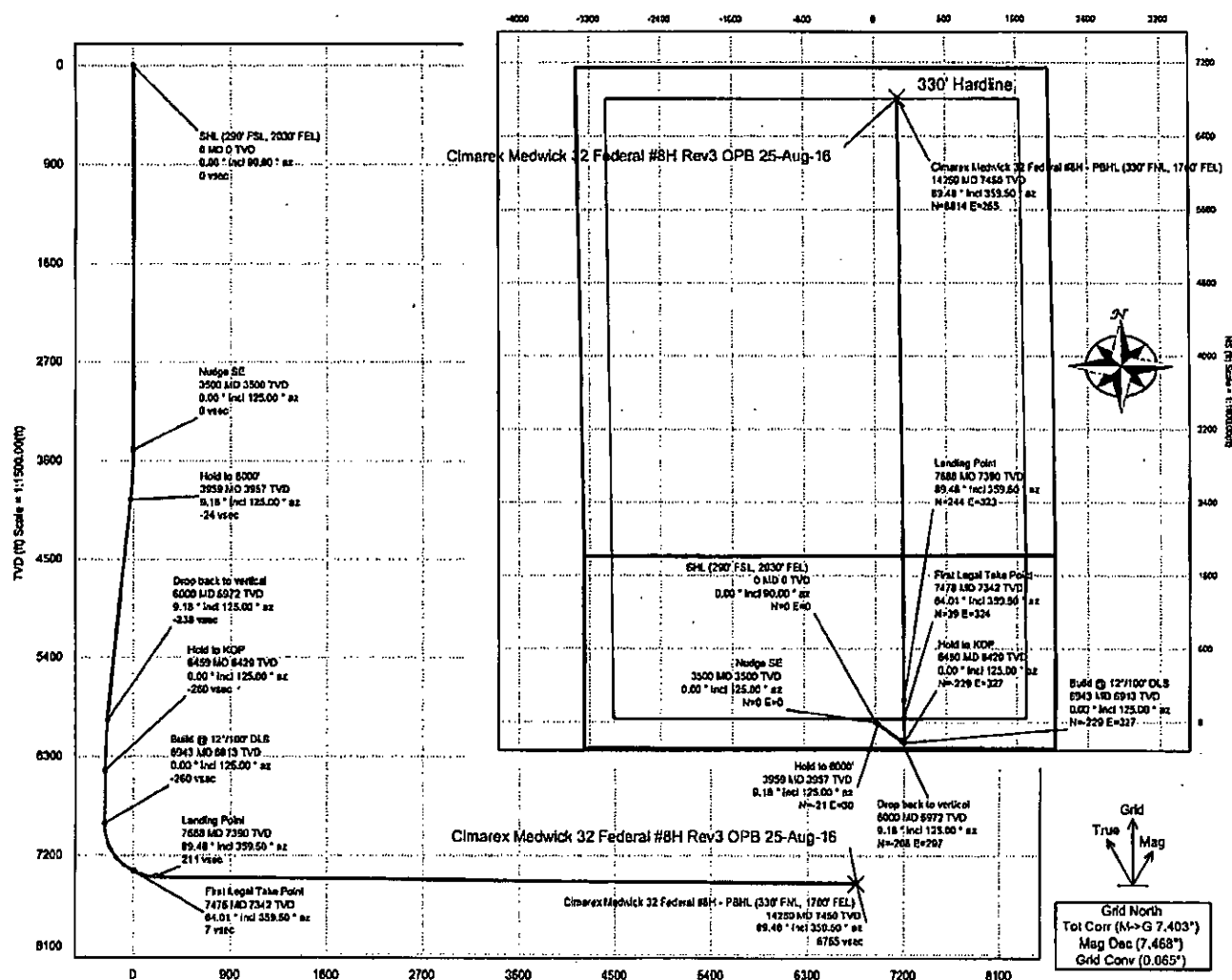
Schlumberger

Cimarex

CIMAREX

Borehole:	Well:	Field:	Structure:
Original Borehole	Medwick 32 Federal #8H	NM Eddy County (NAD 83)	TBD
Gravity & Stage Parameters	Surface Location	Miscellaneous	
Model: HDSM 2018 7.463"	Dip: 68.791° Date: 25-Aug-2016 Gravity PB: 985.845mgal (8.8865 Based)	NAD83 New Mexico State Plane, Eastern Zone, US Feet Lat: N 32 8 9.97 Nearing: 344081.8311U Grid Conv: 0.0614° Lon: W 104 12 35.47 Easting: 579814.7211U Scale Fact: 0.99991077	Medwick 32 Federal #8H Plan: Medwick 32 Federal #8H Rev3 OPB 25-Aug-16 TVD Ref: Ground Level (1192ft above MSL)

DW (R) Scale = 1:1000.0000



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL (290' FSL, 2030' FEL)	0.00	0.00	90.00	0.00	0.00	0.00	0.00	
Nudge SE	3500.00	0.00	125.00	3500.00	0.00	0.00	0.00	0.00
Hold to 6000'	3959.00	9.18	125.00	3957.04	-19.86	-21.05	30.06	2.00
Drop back to vertical	6000.00	9.18	125.00	5971.90	-196.11	-207.81	298.78	0.00
Hold to KOP	6459.00	0.00	125.00	6428.94	-215.97	-228.86	326.84	2.00
Build @ 12°/100' DLS	6942.62	0.00	125.00	6912.56	-215.97	-228.86	326.84	0.00
First Legal Take Point	7476.00	64.01	359.50	7341.72	51.92	39.33	324.50	12.00
Landing Point	7688.24	89.48	359.50	7390.00	256.58	244.22	322.71	12.00
Cimarex Medwick 32 Federal #8H - PBHL (330' FNL, 1700' FEL)	14258.70	89.48	359.50	7450.00	6819.30	6814.14	265.15	0.00

Schlumberger

Cimarex Medwick 32 Federal #8H Rev3 OPB 25-Aug-16 Proposal Report



(Non-Def Plan)

Report Date: August 25, 2016 - 02:50 PM
 Client: Cimarex
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Cimarex Medwick 32 Federal #8H / Cimarex Medwick 32 Federal #8H
 Well: Cimarex Medwick 32 Federal #8H
 Borehole: Original Borehole
 UWI / AP#/: Unknown / Unknown
 Survey Name: Cimarex Medwick 32 Federal #8H Rev3 OPB 25-Aug-16
 Survey Date: September 25, 2013
 Tort / AHD / DDI / ERD Ratio: 107.839 * / 7442.287 ft / 6.186 / 0.999
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 0' 2.97427" W 104° 12' 35.46894"
 Location Grid NE YX: N 364081.930 RUS, E 579814.760 RUS
 CRS Grid Convergence Angle: 0.0654°
 Grid Scale Factor: 0.99991077
 Version / Patch: 2.9.370.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 2.228° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 2.228° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft

TVD Reference Datum: Ground Level
 TVD Reference Elevation: 3182.000 ft above MSL
 Seabed / Ground Elevation: 3182.000 ft above MSL
 Magnetic Declination: 7.488°
 Total Gravity Field Strength: 998.6854 mgal (9.80665 Based)
 Gravity Model: DOX
 Total Magnetic Field Strength: 48047.704 nT
 Magnetic Dip Angle: 59.701°
 Declination Date: August 25, 2016
 Magnetic Declination Model: HDGM 2016
 North Reference: Grid North
 Grid Convergence Used: 0.0654°
 Total Carr Mag North->Grid North: 7.4030°

Local Coord Referenced To: Structure Reference Point

Comments	MID (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Eastings (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
SHL (290' FSL)	0.00	0.00	90.00	0.00	0.00	0.00	0.00	N/A	364081.93	579614.76	N 32° 0' 2.97"	W 104° 12' 35.47"
2030' FEL	3500.00	0.00	125.00	3500.00	0.00	0.00	0.00	0.00	364081.93	579614.76	N 32° 0' 2.97"	W 104° 12' 35.47"
Nudge SE	3959.00	9.18	125.00	3957.04	-19.86	-21.05	30.06	2.00	364040.89	579644.81	N 32° 0' 2.77"	W 104° 12' 35.12"
Hold to 6000'	6000.00	9.18	125.00	5971.90	-196.11	-207.81	298.78	0.00	363854.14	579911.52	N 32° 0' 0.91"	W 104° 12' 32.03"
Drop back to vertical	6459.00	0.00	125.00	6428.94	-215.97	-228.88	326.84	2.00	363833.09	579941.57	N 32° 0' 0.71"	W 104° 12' 31.68"
Hold to KOP	6942.62	0.00	125.00	6912.56	-215.97	-228.88	326.84	0.00	363833.09	579941.57	N 32° 0' 0.71"	W 104° 12' 31.68"
Build @ 127'100'	7688.25	89.48	359.50	7390.00	256.58	244.22	322.71	12.00	364306.12	579937.44	N 32° 0' 5.39"	W 104° 12' 31.72"
Landing Point												
Cimarex Medwick 32 Federal #8H - PBHL (330' FNL, 1700' FEL)	14258.70	89.48	359.50	7450.00	6619.30	6614.14	265.15	0.00	370875.45	579879.89	N 32° 1' 10.40"	W 104° 12' 32.30"

Survey Type:

Non-Def Plan

Survey Error Model:

ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Drilling Office 2.9.370.0

..Cimarex Medwick 32 Federal #8HOriginal BoreholeCimarex Medwick 32 Federal #8H Rev3 OPB 25-Aug-16

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Comments	MD (ft)	Incl (°)	Azim Grd (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey			

Original Borehole / Cimarex
Medwick 32 Federal #8H Rev3

1 0.000 14258.697 1/100.000 30.000 30.000 SLB_MWD-STD

Schlumberger

Cimarex Medwick 32 Federal #8H Rev3 OPB 25-Aug-16 Proposal Report



(Non-Def Plan)

Report Date: August 25, 2016 - 03:36 PM
 Client: Cimarex
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Cimarex Medwick 32 Federal #8H / Cimarex Medwick 32 Federal #8H
 Well: Cimarex Medwick 32 Federal #8H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cimarex Medwick 32 Federal #8H Rev3 OPB 25-Aug-16
 Survey Date: September 25, 2013
 Tort / AHD / DDI / ERD Ratio: 107.839 * / 7442.267 ft / 6.186 / 0.889
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 0' 2.97427" W 104° 12' 35.46894"
 Location Grid NE Y/X: N 364061.930 RUS, E 579614.760 RUS
 CRS Grid Convergence Angle: 0.0654 *
 Grid Scale Factor: 0.99991077
 Version / Patch: 2.9.370.0

Survey / DLS Computation:
 Vertical Section Azimuth: 2.228 * (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: Ground Level
 TVD Reference Elevation: 3192.000 ft above MSL
 Seabed / Ground Elevation: 3192.000 ft above MSL
 Magnetic Declination: 7.468 *
 Total Gravity Field Strength: 998.6854mg (9.80665 Based)
 Gravity Model: COX
 Total Magnetic Field Strength: 48047.704 nT
 Magnetic Dip Angle: 59.701 *
 Declination Date: August 25, 2016
 Magnetic Declination Model: HDGM 2016
 North Reference: Grid North
 Grid Convergence Used: 0.0654 *
 Total Corr Mag North->Grid North: 7.4030 *
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Ghd (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northings (RUS)	Eastings (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL (280' FSL, 2030' FEL)	0.00	0.00	90.00	0.00	0.00	0.00	0.00	N/A	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	100.00	0.00	125.00	100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	200.00	0.00	125.00	200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	300.00	0.00	125.00	300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	400.00	0.00	125.00	400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	500.00	0.00	125.00	500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	600.00	0.00	125.00	600.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	700.00	0.00	125.00	700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	800.00	0.00	125.00	800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	900.00	0.00	125.00	900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1000.00	0.00	125.00	1000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1100.00	0.00	125.00	1100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1200.00	0.00	125.00	1200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1300.00	0.00	125.00	1300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1400.00	0.00	125.00	1400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1500.00	0.00	125.00	1500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1600.00	0.00	125.00	1600.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1700.00	0.00	125.00	1700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1800.00	0.00	125.00	1800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	1900.00	0.00	125.00	1900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2000.00	0.00	125.00	2000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2100.00	0.00	125.00	2100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2200.00	0.00	125.00	2200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2300.00	0.00	125.00	2300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2400.00	0.00	125.00	2400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2500.00	0.00	125.00	2500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Nothing (ft/US)	Eastings (ft/US)	Latitude (N/S + °)	Longitude (E/W + °)
	2600.00	0.00	125.00	2800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2700.00	0.00	125.00	2700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2800.00	0.00	125.00	2800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	2900.00	0.00	125.00	2900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3000.00	0.00	125.00	3000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3100.00	0.00	125.00	3100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3200.00	0.00	125.00	3200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3300.00	0.00	125.00	3300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3400.00	0.00	125.00	3400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3500.00	0.00	125.00	3500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3600.00	0.00	125.00	3600.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3700.00	0.00	125.00	3700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3800.00	0.00	125.00	3800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	3900.00	0.00	125.00	3900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4000.00	0.00	125.00	4000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4100.00	0.00	125.00	4100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4200.00	0.00	125.00	4200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4300.00	0.00	125.00	4300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4400.00	0.00	125.00	4400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4500.00	0.00	125.00	4500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4600.00	0.00	125.00	4600.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4700.00	0.00	125.00	4700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4800.00	0.00	125.00	4800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	4900.00	0.00	125.00	4900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5000.00	0.00	125.00	5000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5100.00	0.00	125.00	5100.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5200.00	0.00	125.00	5200.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5300.00	0.00	125.00	5300.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5400.00	0.00	125.00	5400.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5500.00	0.00	125.00	5500.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5600.00	0.00	125.00	5600.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5700.00	0.00	125.00	5700.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5800.00	0.00	125.00	5800.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	5900.00	0.00	125.00	5900.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
	6000.00	0.00	125.00	6000.00	0.00	0.00	0.00	0.00	364061.93	579614.76	N 32 0 2.97	W 104 12 35.47
Drop back to vertical	6100.00	7.18	125.00	6070.88	-203.81	-215.97	308.44	2.00	363845.98	579923.17	N 32 0 0.83	W 104 12 31.89
	6200.00	5.18	125.00	6170.29	-209.64	-222.15	317.26	2.00	363839.80	579931.89	N 32 0 0.77	W 104 12 31.79
	6300.00	3.18	125.00	6270.02	-213.58	-226.33	323.23	2.00	363835.62	579937.86	N 32 0 0.73	W 104 12 31.72
	6400.00	1.18	125.00	6369.94	-215.65	-228.51	326.34	2.00	363833.44	579941.07	N 32 0 0.71	W 104 12 31.68
	6450.00	0.00	125.00	6428.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
	6500.00	0.00	125.00	6469.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
	6600.00	0.00	125.00	6569.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
	6700.00	0.00	125.00	6669.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
	6800.00	0.00	125.00	6769.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
	6900.00	0.00	125.00	6869.94	-215.87	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
Build @ 12°/100'	6942.62	0.00	125.00	6912.56	-215.97	-228.86	326.84	0.00	363833.09	579941.57	N 32 0 0.71	W 104 12 31.68
DLS	7000.00	6.89	359.50	6969.80	-212.53	-225.41	326.81	12.00	363836.54	579941.54	N 32 0 0.74	W 104 12 31.68
	7100.00	18.89	359.50	7087.10	-190.30	-203.15	326.82	12.00	363838.79	579941.35	N 32 0 0.86	W 104 12 31.68
	7200.00	30.89	359.50	7157.65	-148.34	-161.15	326.85	12.00	363890.79	579940.98	N 32 0 1.38	W 104 12 31.68
	7300.00	42.89	359.50	7237.47	-88.50	-101.24	325.73	12.00	363960.70	579940.48	N 32 0 1.97	W 104 12 31.68
	7400.00	54.89	359.50	7303.13	-13.38	-26.04	325.07	12.00	364035.89	579939.80	N 32 0 2.71	W 104 12 31.68
	7500.00	66.89	359.50	7351.69	73.72	61.16	324.31	12.00	364123.08	579939.04	N 32 0 3.58	W 104 12 31.70
	7600.00	78.89	359.50	7381.07	169.01	156.55	323.47	12.00	364218.47	579938.20	N 32 0 4.52	W 104 12 31.71
	7688.25	88.48	359.50	7390.00	256.56	244.22	322.71	12.00	364306.12	579937.44	N 32 0 5.38	W 104 12 31.72
Landing Point	7700.00	89.48	359.50	7390.11	268.32	255.97	322.60	0.00	364317.88	579937.33	N 32 0 5.50	W 104 12 31.72

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northng (ft/US)	Eastng (ft/US)	Latitude (N/S...)	Longitude (E/W...)
	7800.00	89.48	359.50	7391.03	398.20	355.96	321.73	0.00	364417.86	579938.46	N 32 0 6.49	W 104 12 31.73
	7900.00	89.48	359.50	7391.94	468.08	455.95	320.86	0.00	364517.84	579935.58	N 32 0 7.48	W 104 12 31.74
	8000.00	89.48	359.50	7392.88	567.97	555.95	319.98	0.00	364617.82	579934.71	N 32 0 8.47	W 104 12 31.75
	8100.00	89.48	359.50	7393.77	667.85	655.94	319.11	0.00	364717.81	579933.84	N 32 0 9.46	W 104 12 31.75
	8200.00	89.48	359.50	7394.69	767.73	755.93	318.23	0.00	364817.79	579932.96	N 32 0 10.45	W 104 12 31.76
	8300.00	89.48	359.50	7395.60	867.61	855.82	317.36	0.00	364917.77	579932.09	N 32 0 11.44	W 104 12 31.77
	8400.00	89.48	359.50	7396.52	967.50	955.81	316.48	0.00	365017.76	579931.22	N 32 0 12.43	W 104 12 31.78
	8500.00	89.48	359.50	7397.44	1067.38	1055.91	315.61	0.00	365117.74	579930.34	N 32 0 13.42	W 104 12 31.79
	8600.00	89.48	359.50	7398.35	1167.26	1155.89	314.74	0.00	365217.72	579929.47	N 32 0 14.41	W 104 12 31.80
	8700.00	89.48	359.50	7399.27	1267.14	1255.88	313.86	0.00	365317.70	579928.59	N 32 0 15.40	W 104 12 31.81
	8800.00	89.48	359.50	7400.18	1367.03	1355.86	312.98	0.00	365417.68	579927.72	N 32 0 16.39	W 104 12 31.82
	8900.00	89.48	359.50	7401.10	1466.91	1455.87	312.11	0.00	365517.67	579926.84	N 32 0 17.38	W 104 12 31.83
	9000.00	89.48	359.50	7402.01	1566.79	1555.87	311.24	0.00	365617.65	579925.97	N 32 0 18.37	W 104 12 31.84
	9100.00	89.48	359.50	7402.93	1666.67	1655.86	310.36	0.00	365717.64	579925.09	N 32 0 19.36	W 104 12 31.85
	9200.00	89.48	359.50	7403.84	1766.56	1755.85	309.49	0.00	365817.62	579924.22	N 32 0 20.35	W 104 12 31.86
	9300.00	89.48	359.50	7404.76	1866.44	1855.84	308.61	0.00	365917.60	579923.34	N 32 0 21.34	W 104 12 31.87
	9400.00	89.48	359.50	7405.67	1966.32	1955.83	307.74	0.00	366017.58	579922.47	N 32 0 22.32	W 104 12 31.87
	9500.00	89.48	359.50	7406.59	2066.20	2055.83	306.86	0.00	366117.57	579921.60	N 32 0 23.31	W 104 12 31.88
	9600.00	89.48	359.50	7407.50	2166.08	2155.82	305.99	0.00	366217.55	579920.72	N 32 0 24.30	W 104 12 31.89
	9700.00	89.48	359.50	7408.42	2265.97	2255.81	305.11	0.00	366317.53	579919.85	N 32 0 25.29	W 104 12 31.90
	9800.00	89.48	359.50	7409.33	2365.85	2355.80	304.24	0.00	366417.52	579918.97	N 32 0 26.28	W 104 12 31.90
	9900.00	89.48	359.50	7410.24	2465.73	2455.79	303.36	0.00	366517.50	579918.09	N 32 0 27.27	W 104 12 31.91
	10000.00	89.48	359.50	7411.16	2565.61	2555.78	302.49	0.00	366617.48	579917.22	N 32 0 28.26	W 104 12 31.92
	10100.00	89.48	359.50	7412.07	2665.50	2655.76	301.61	0.00	366717.47	579916.34	N 32 0 29.25	W 104 12 31.93
	10200.00	89.48	359.50	7412.99	2765.38	2755.77	300.74	0.00	366817.45	579915.47	N 32 0 30.24	W 104 12 31.94
	10300.00	89.48	359.50	7413.80	2865.26	2855.76	299.86	0.00	366917.43	579914.59	N 32 0 31.23	W 104 12 31.95
	10400.00	89.48	359.50	7414.80	2965.14	2955.75	298.99	0.00	367017.41	579913.72	N 32 0 32.22	W 104 12 31.96
	10500.00	89.48	359.50	7415.73	3065.03	3055.75	298.11	0.00	367117.40	579912.84	N 32 0 33.21	W 104 12 31.97
	10600.00	89.48	359.50	7416.64	3164.91	3155.74	297.23	0.00	367217.38	579911.97	N 32 0 34.20	W 104 12 31.98
	10700.00	89.48	359.50	7417.55	3264.79	3255.73	296.36	0.00	367317.36	579911.09	N 32 0 35.19	W 104 12 31.99
	10800.00	89.48	359.50	7418.47	3364.67	3355.72	295.48	0.00	367417.35	579910.22	N 32 0 36.18	W 104 12 32.00
	10900.00	89.48	359.50	7419.38	3464.56	3455.71	294.61	0.00	367517.33	579909.34	N 32 0 37.17	W 104 12 32.01
	11000.00	89.48	359.50	7420.29	3564.44	3555.71	293.73	0.00	367617.31	579908.46	N 32 0 38.16	W 104 12 32.02
	11100.00	89.48	359.50	7421.21	3664.32	3655.70	292.86	0.00	367717.29	579907.59	N 32 0 39.15	W 104 12 32.03
	11200.00	89.48	359.50	7422.12	3764.20	3755.69	291.98	0.00	367817.28	579906.71	N 32 0 40.14	W 104 12 32.04
	11300.00	89.48	359.50	7423.03	3864.08	3855.68	291.10	0.00	367917.26	579905.84	N 32 0 41.12	W 104 12 32.05
	11400.00	89.48	359.50	7423.95	3963.97	3955.67	290.23	0.00	368017.24	579904.96	N 32 0 42.11	W 104 12 32.06
	11500.00	89.48	359.50	7424.86	4063.85	4055.67	289.35	0.00	368117.23	579904.08	N 32 0 43.10	W 104 12 32.07
	11600.00	89.48	359.50	7425.77	4163.73	4155.66	288.47	0.00	368217.21	579903.21	N 32 0 44.09	W 104 12 32.08
	11700.00	89.48	359.50	7426.68	4263.61	4255.65	287.60	0.00	368317.19	579902.33	N 32 0 45.08	W 104 12 32.09
	11800.00	89.48	359.50	7427.60	4363.50	4355.64	286.72	0.00	368417.17	579901.46	N 32 0 46.07	W 104 12 32.10
	11900.00	89.48	359.50	7428.51	4463.38	4455.63	285.85	0.00	368517.16	579900.58	N 32 0 47.06	W 104 12 32.11
	12000.00	89.48	359.50	7429.42	4563.26	4555.63	284.97	0.00	368617.14	579899.70	N 32 0 48.05	W 104 12 32.12
	12100.00	89.48	359.50	7430.33	4663.14	4655.62	284.09	0.00	368717.12	579898.83	N 32 0 49.04	W 104 12 32.13
	12200.00	89.48	359.50	7431.24	4763.03	4755.61	283.22	0.00	368817.11	579897.95	N 32 0 50.03	W 104 12 32.14
	12300.00	89.48	359.50	7432.16	4862.91	4855.60	282.34	0.00	368917.09	579897.07	N 32 0 51.02	W 104 12 32.15
	12400.00	89.48	359.50	7433.07	4962.79	4955.59	281.46	0.00	369017.07	579896.20	N 32 0 52.01	W 104 12 32.16
	12500.00	89.48	359.50	7433.98	5062.67	5055.58	280.59	0.00	369117.05	579895.32	N 32 0 53.00	W 104 12 32.17
	12600.00	89.48	359.50	7434.89	5162.55	5155.58	279.71	0.00	369217.04	579894.44	N 32 0 53.99	W 104 12 32.18
	12700.00	89.48	359.50	7435.80	5262.44	5255.57	278.83	0.00	369317.02	579893.57	N 32 0 54.98	W 104 12 32.19
	12800.00	89.48	359.50	7436.72	5362.32	5355.56	277.95	0.00	369417.00	579892.69	N 32 0 55.97	W 104 12 32.20
	12900.00	89.48	359.50	7437.63	5462.20	5455.55	277.08	0.00	369516.99	579891.81	N 32 0 56.96	W 104 12 32.21
	13000.00	89.48	359.50	7438.54	5562.08	5555.55	276.20	0.00	369616.97	579890.93	N 32 0 57.95	W 104 12 32.22
	13100.00	89.48	359.50	7439.45	5661.97	5655.54	275.32	0.00	369716.95	579890.06	N 32 0 58.94	W 104 12 32.23
	13200.00	89.48	359.50	7440.36	5761.85	5755.53	274.45	0.00	369816.93	579889.18	N 32 0 59.92	W 104 12 32.24
	13300.00	89.48	359.50	7441.27	5861.73	5855.52	273.57	0.00	369916.92	579888.30	N 32 1 0.91	W 104 12 32.25
	13400.00	89.48	359.50	7442.18	5961.61	5955.51	272.69	0.00	370016.90	579887.43	N 32 1 1.90	W 104 12 32.26
	13500.00	89.48	359.50	7443.09	6061.49	6055.51	271.81	0.00	370116.88	579886.55	N 32 1 2.89	W 104 12 32.27

Comments	MD (ft)	Incl (°)	Azim Grd (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (1/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	13600.00	89.48	359.50	7444.00	6161.38	6155.50	270.94	0.00	370216.87	579885.67	N 32 1 3.88	W 104 12 32.24
	13700.00	89.48	359.50	7444.81	6261.26	6255.49	270.06	0.00	370316.85	579884.79	N 32 1 4.87	W 104 12 32.25
	13800.00	89.48	359.50	7445.82	6361.14	6355.48	269.18	0.00	370416.83	579883.82	N 32 1 5.86	W 104 12 32.26
	13900.00	89.48	359.50	7446.74	6461.02	6455.47	268.30	0.00	370516.81	579883.04	N 32 1 6.85	W 104 12 32.27
	14000.00	89.48	359.50	7447.65	6560.91	6555.47	267.43	0.00	370616.80	579882.16	N 32 1 7.84	W 104 12 32.28
	14100.00	89.48	359.50	7448.56	6660.79	6655.46	266.55	0.00	370716.78	579881.28	N 32 1 8.83	W 104 12 32.28
	14200.00	89.48	359.50	7449.47	6760.67	6755.45	265.67	0.00	370816.76	579880.41	N 32 1 9.82	W 104 12 32.29
Cimarex Medwick 32 Federal #8H - PBHL (330' FNL, 1700' FEL)	14258.70	89.48	359.50	7450.00	6819.30	6814.14	265.15	0.00	370875.45	579879.89	N 32 1 10.40	W 104 12 32.30

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)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	14258.697	1/100.000	30.000	30.000		SLB_MWD-STD	Original Borehole / Cimarex Medwick 32 Federal #8H Rev3