

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.
NMNM114350

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
KLEIN 33 FEDERAL COM 7H

9. API Well No.
30-015-42180-00-X1

10. Field and Pool, or Exploratory
WILDCAT

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
CIMAREX ENERGY COMPANY OF CO
Contact: TERRI STATHEM
E-Mail: tstathem@cimarex.com

3a. Address
202 S CHEYENNE AVE SUITE 1000
TULSA, OK 74103.4346

3b. Phone No. (include area code)
Ph: 432-620-1936

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 33 T26S R27E Lot 2 290FSL 2560FEL
32.000215 N Lat, 104.113986 W Lon

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.)

Cimarex Energy respectfully request a approval to change the landing point, directional plan and first take point for the Klein 33 Federal Com #7H 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. 33.

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

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 13 2016
By
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14. I hereby certify that the foregoing is true and correct.

Electronic Submission #349752 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 09/01/2016 (16CN0026SE)

Name (Printed/Typed) TERRI STATHEM Title MANAGER REGULATORY COMPLIANCE

Signature (Electronic Submission) Date 09/01/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER Title PETROLEUM ENGINEER Date 09/01/2016

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.

NM OIL CONSERVATION

ARTESIA DISTRICT

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 Brazos 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

SEP 13 2016

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

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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30015-42180		² Pool Code 98018		³ Pool Name Wildcat; Bone Spring	
⁴ Property Code 40358		⁵ Property Name KLEIN 33 FEDERAL COM			⁶ Well Number 7H
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.			⁹ Elevation 3197'

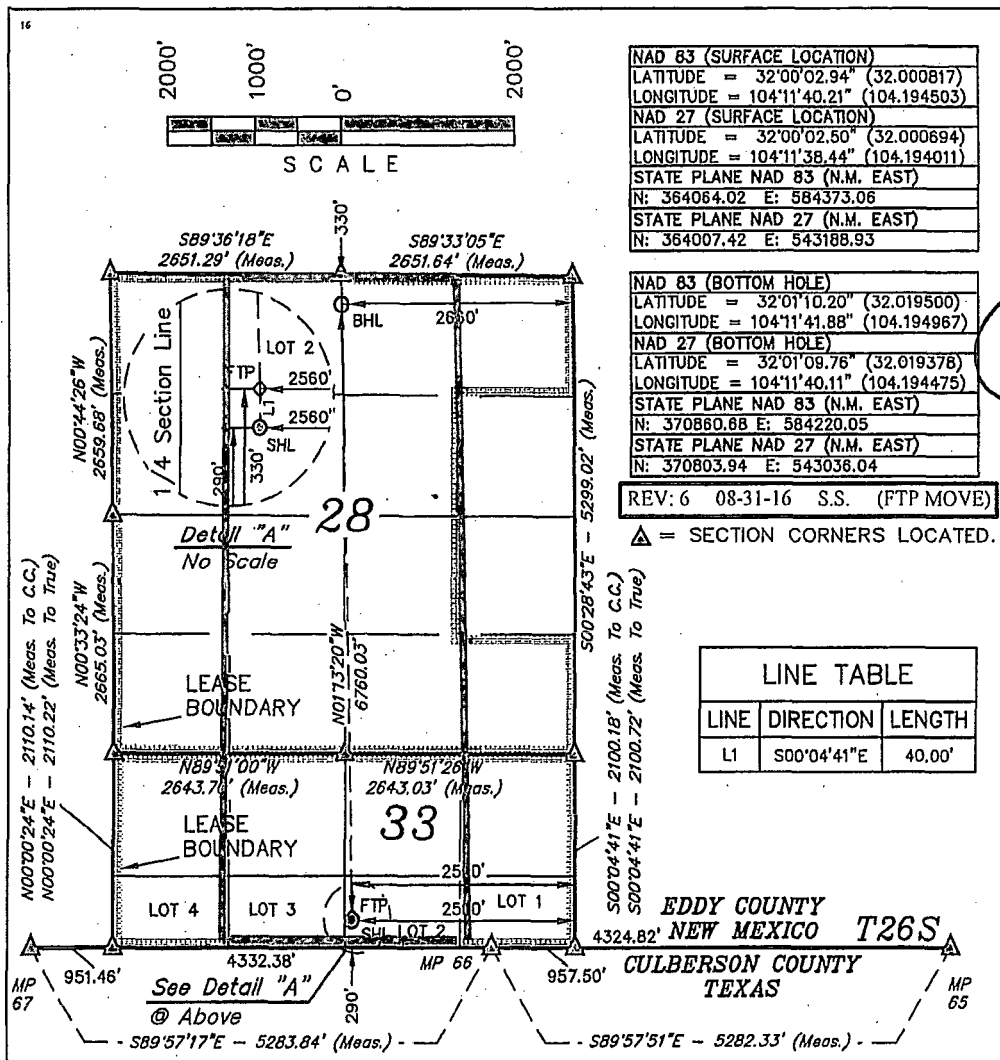
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	33	26S	27E		290	SOUTH	2560	EAST	EDDY

¹¹ 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
C	28	26S	27E		330	NORTH	2660	EAST	EDDY
¹² Dedicated Acres 446.36'		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.



¹⁷ 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.

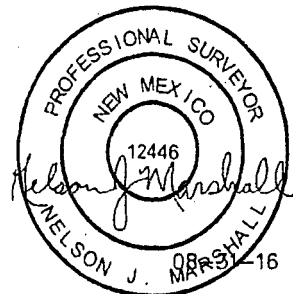
Signature: *Teri Stathem* Date: 08-31-16
Printed Name: Teri Stathem
E-mail Address: TStathem@cimarex.com

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

August 29, 2013

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

LINE TABLE

LINE	DIRECTION	LENGTH
L1	S00°04'41\"E	40.00'

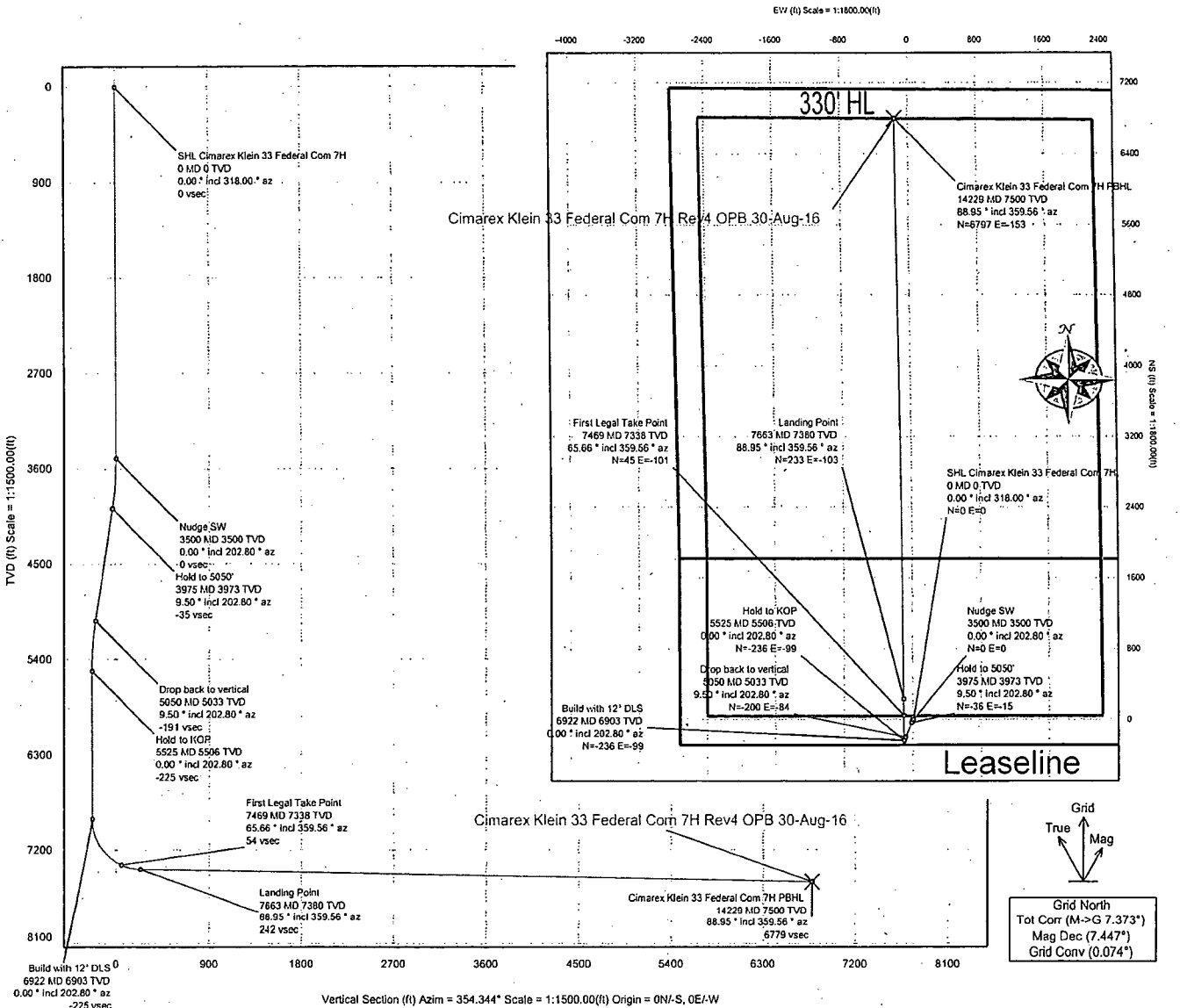
REV: 6 08-31-16 S.S. (FTP MOVE)
▲ = SECTION CORNERS LOCATED.

EDDY COUNTY
NEW MEXICO T26S
CULBERSON COUNTY
TEXAS



Borehole: Original Borehole	Well: Klein 33 Federal Com #7H	Field: NM Eddy County (NAD 83)	Structure: TBD
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Gravity & Magnetic Parameters Model: HDGM 2016 Dip: 59.706° Date: 30-Aug-2016 MagDec: 7.447° FS: 48053.367nT Gravity FS: 998.685mgm (8.80665 Based)	Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet Lat: N 32 0 2.94 Northing: 364064.021 US Grid Conv: 0.0736° Lon: W 104 11 40.21 Easting: 584373.067 US Scale Fact: 0.99991121	Miscellaneous Slot: Federal Com # TVD Ref: Ground level (3197ft above MSL) Plan: Klein 33 Federal Com 7H Rev4 OPB 30-Aug-16
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Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL Cimarex Klein 33 Federal Com 7H	0.00	0.00	318.00	0.00	0.00	0.00	0.00	
Nudge SW	3500.00	0.00	202.80	3500.00	0.00	0.00	0.00	0.00
Hold to 5050'	3975.00	9.50	202.80	3972.83	-35.87	-36.22	-15.23	2.00
Drop back to vertical	5050.00	9.50	202.80	5033.08	-197.84	-199.78	-83.98	0.00
Hold to KOP	5525.00	0.00	202.80	5505.91	-233.71	-236.00	-99.21	2.00
Build with 12" DLS	6921.71	0.00	202.80	6902.62	-233.71	-236.00	-99.21	0.00
First Legal Take Point	7468.84	65.66	359.56	7337.63	46.91	44.64	-101.35	12.00
Landing Point	7662.99	88.95	359.56	7380.01	234.99	232.73	-102.79	12.00
Cimarex Klein 33 Federal Com 7H PBHL	14228.82	88.95	359.56	7500.00	6799.00	6797.28	-153.02	0.00

Schlumberger

Cimarex Klein 33 Federal Com 7H Rev4 OPB 30-Aug-16 Proposal Report



NM OIL CONSERVATION
ARTESIA DISTRICT

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(Non-Def Plan)

Report Date: August 30, 2016 - 03:27 PM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Klein 33 Federal Com #7H / Cimarex Klein 33 Federal Com #7H
Well: Cimarex Klein 33 Federal Com #7H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Klein 33 Federal Com 7H Rev4 OPB 30-Aug-16
Survey Date: October 09, 2015
Tort / AHD / DJI / ERD Ratio: 107.956 ° / 7289.487 ft / 6.174 / 0.972
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 0' 2.93783", W 104° 11' 40.20876"
Location Grid N/E Y/X: N 364064.020 RUS, E 584373.060 RUS
CRS Grid Convergence Angle: 0.0736 °
Grid Scale Factor: 0.99991121
Version / Patch: 2.9.370.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 358.710 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground level
TVD Reference Elevation: 3197.000 ft above MSL
Seabed / Ground Elevation: 3197.000 ft above MSL
Magnetic Declination: 7.447 °
Total Gravity Field Strength: 998.6852mgm (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 48053.367 nT
Magnetic Dip Angle: 59.706 °
Declination Date: August 30, 2016
Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.0736 °
Total Corr Mag North->Grid North: 7.3737 °
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 Klein 33 Federal Com 7H	0.00	0.00	318.00	0.00	0.00	0.00	0.00	N/A	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
Nudge SW	3500.00	0.00	202.80	3500.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
Hold to 5050'	3975.00	9.50	202.80	3972.83	-35.87	-36.22	-15.23	2.00	364027.80	584357.84	N 32 0 2.58	W 104 11 40.39
Drop back to vertical	5050.00	9.50	202.80	5033.08	-197.84	-199.78	-83.98	0.00	363864.26	584289.09	N 32 0 0.96	W 104 11 41.19
Hold to KOP	5525.00	0.00	202.80	5505.91	-233.71	-236.00	-99.21	2.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
Build with 12° DLS	6921.71	0.00	202.80	6902.62	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
Landing Point	7662.99	88.95	359.56	7380.01	234.99	232.73	-102.79	12.00	364296.73	584270.28	N 32 0 5.24	W 104 11 41.40
Cimarex Klein 33 Federal Com 7H PBHL	14228.82	88.95	359.56	7500.00	6799.00	6797.28	-153.02	0.00	370860.68	584220.05	N 32 1 10.20	W 104 11 41.88

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 Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey

Comments	MD (ft)	Incl (°)	Azimuth Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
		1	0.000	14228.825	1/100.000	30.000	30.000		SLB_MWD-STD			

Original Borehole / Cimarex Klein
33 Federal Com 7H Rev4 OPB 30-



Cimarex Klein 33 Federal Com 7H Rev4 OPB 30-Aug-16 Proposal Report

(Non-Def Plan)

Report Date: August 30, 2016 - 03:28 PM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Klein 33 Federal Com #7H / Cimarex Klein 33 Federal Com #7H
Well: Cimarex Klein 33 Federal Com #7H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Klein 33 Federal Com 7H Rev4 OPB 30-Aug-16
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Location Grid N/E Y/X: N 364064.020 ftUS, E 584373.060 ftUS
CRS Grid Convergence Angle: 0.0736°
Grid Scale Factor: 0.99991121
Version / Patch: 2.9.370.0

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Vertical Section Azimuth: 358.710° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
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TVD Reference Elevation: 3197.000 ft above MSL
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Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.0736°
Total Corr Mag North->Grid North: 7.3737°
Local Coord Referenced To: Structure Reference Point

NM OIL CONSERVATION
 ARTESIA DISTRICT
SEP 13 2016
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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 Klein 33 Federal Com 7H	0.00	0.00	318.00	0.00	0.00	0.00	0.00	N/A	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	100.00	0.00	202.80	100.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	200.00	0.00	202.80	200.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	300.00	0.00	202.80	300.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	400.00	0.00	202.80	400.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	500.00	0.00	202.80	500.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	600.00	0.00	202.80	600.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	700.00	0.00	202.80	700.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	800.00	0.00	202.80	800.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	900.00	0.00	202.80	900.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1000.00	0.00	202.80	1000.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1100.00	0.00	202.80	1100.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1200.00	0.00	202.80	1200.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1300.00	0.00	202.80	1300.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1400.00	0.00	202.80	1400.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1500.00	0.00	202.80	1500.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1600.00	0.00	202.80	1600.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1700.00	0.00	202.80	1700.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1800.00	0.00	202.80	1800.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	1900.00	0.00	202.80	1900.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2000.00	0.00	202.80	2000.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2100.00	0.00	202.80	2100.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2200.00	0.00	202.80	2200.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21

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 ° ' '')
	2300.00	0.00	202.80	2300.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2400.00	0.00	202.80	2400.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2500.00	0.00	202.80	2500.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2600.00	0.00	202.80	2600.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2700.00	0.00	202.80	2700.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2800.00	0.00	202.80	2800.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	2900.00	0.00	202.80	2900.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3000.00	0.00	202.80	3000.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3100.00	0.00	202.80	3100.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3200.00	0.00	202.80	3200.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3300.00	0.00	202.80	3300.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3400.00	0.00	202.80	3400.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3500.00	0.00	202.80	3500.00	0.00	0.00	0.00	0.00	364064.02	584373.06	N 32 0 2.94	W 104 11 40.21
	3600.00	2.00	202.80	3599.98	-1.99	-1.61	-0.68	2.00	364062.41	584372.38	N 32 0 2.92	W 104 11 40.22
Nudge SW	3700.00	4.00	202.80	3699.84	-6.37	-6.43	-2.70	2.00	364057.59	584370.36	N 32 0 2.87	W 104 11 40.24
	3800.00	6.00	202.80	3798.45	-14.33	-14.47	-6.08	2.00	364049.55	584366.98	N 32 0 2.79	W 104 11 40.28
	3900.00	8.00	202.80	3898.70	-25.45	-25.70	-10.80	2.00	364038.32	584362.26	N 32 0 2.68	W 104 11 40.33
	3975.00	9.50	202.80	3972.83	-35.87	-36.22	-15.23	2.00	364027.80	584357.84	N 32 0 2.54	W 104 11 40.39
Hold to 5050'	4000.00	9.50	202.80	3997.48	-39.63	-40.02	-16.82	0.00	364024.00	584356.24	N 32 0 2.54	W 104 11 40.40
	4100.00	9.50	202.80	4096.11	-54.70	-55.24	-23.22	0.00	364008.79	584349.84	N 32 0 2.39	W 104 11 40.48
	4200.00	9.50	202.80	4194.74	-69.77	-70.45	-29.62	0.00	363993.57	584343.45	N 32 0 2.24	W 104 11 40.55
	4300.00	9.50	202.80	4293.37	-84.84	-85.67	-36.01	0.00	363978.36	584337.05	N 32 0 2.09	W 104 11 40.63
	4400.00	9.50	202.80	4392.00	-99.90	-100.88	-42.41	0.00	363963.15	584330.66	N 32 0 1.94	W 104 11 40.70
	4500.00	9.50	202.80	4490.63	-114.97	-116.10	-48.80	0.00	363947.93	584324.26	N 32 0 1.79	W 104 11 40.78
	4600.00	9.50	202.80	4589.26	-130.04	-131.31	-55.20	0.00	363932.72	584317.87	N 32 0 1.64	W 104 11 40.85
	4700.00	9.50	202.80	4687.88	-145.11	-146.53	-61.59	0.00	363917.50	584311.47	N 32 0 1.49	W 104 11 40.93
	4800.00	9.50	202.80	4786.51	-161.17	-161.74	-67.99	0.00	363902.29	584305.08	N 32 0 1.34	W 104 11 41.00
	4900.00	9.50	202.80	4885.14	-175.24	-176.96	-74.39	0.00	363887.08	584298.68	N 32 0 1.19	W 104 11 41.08
	5000.00	9.50	202.80	4983.77	-190.31	-192.17	-80.78	0.00	363871.86	584292.28	N 32 0 1.04	W 104 11 41.15
Drop back to vertical	5050.00	9.50	202.80	5033.08	-197.84	-199.78	-83.98	0.00	363864.26	584289.09	N 32 0 0.96	W 104 11 41.19
	5100.00	8.50	202.80	5082.47	-204.98	-206.99	-87.01	2.00	363857.05	584286.06	N 32 0 0.89	W 104 11 41.22
	5200.00	6.50	202.80	5181.61	-216.90	-219.02	-92.07	2.00	363845.02	584281.00	N 32 0 0.77	W 104 11 41.28
	5300.00	4.50	202.80	5281.14	-225.65	-227.86	-95.78	2.00	363836.18	584277.29	N 32 0 0.68	W 104 11 41.32
	5400.00	2.50	202.80	5380.95	-231.22	-233.49	-98.15	2.00	363830.55	584274.92	N 32 0 0.63	W 104 11 41.35
	5500.00	0.50	202.80	5480.91	-233.61	-235.90	-99.16	2.00	363828.14	584273.91	N 32 0 0.60	W 104 11 41.36
Hold to KOP	5525.00	0.00	202.80	5505.91	-233.71	-236.00	-99.21	2.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	5600.00	0.00	202.80	5580.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	5700.00	0.00	202.80	5680.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	5800.00	0.00	202.80	5780.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	5900.00	0.00	202.80	5880.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6000.00	0.00	202.80	5980.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6100.00	0.00	202.80	6080.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6200.00	0.00	202.80	6180.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6300.00	0.00	202.80	6280.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6400.00	0.00	202.80	6380.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6500.00	0.00	202.80	6480.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6600.00	0.00	202.80	6580.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6700.00	0.00	202.80	6680.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6800.00	0.00	202.80	6780.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	6900.00	0.00	202.80	6880.91	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
Build with 12° DLS	6921.71	0.00	202.80	6902.62	-233.71	-236.00	-99.21	0.00	363828.04	584273.86	N 32 0 0.60	W 104 11 41.36
	7000.00	9.39	359.56	6980.56	-227.30	-229.60	-99.25	12.00	363834.44	584273.81	N 32 0 0.67	W 104 11 41.36
	7100.00	21.39	359.56	7076.80	-200.81	-203.10	-99.46	12.00	363860.94	584273.61	N 32 0 0.93	W 104 11 41.37
	7200.00	33.39	359.56	7165.42	-154.89	-157.17	-99.81	12.00	363906.86	584273.26	N 32 0 1.38	W 104 11 41.37
	7300.00	45.39	359.56	7242.56	-91.54	-93.82	-100.29	12.00	363970.20	584272.78	N 32 0 2.01	W 104 11 41.37
	7400.00	57.39	359.56	7304.84	-13.55	-15.82	-100.89	12.00	364048.20	584272.18	N 32 0 2.78	W 104 11 41.38

Comments	MD (ft)	Incl (°)	Azirn Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7500.00	69.39	359.56	7349.54	75.69	73.42	-101.57	12.00	364137.44	584271.50	N 32 0 3.67	W 104 11 41.39
	7600.00	81.39	359.56	7374.71	172.27	170.01	-102.31	12.00	364234.02	584270.76	N 32 0 4.62	W 104 11 41.39
Landing Point	7662.99	88.95	359.56	7380.01	234.99	232.73	-102.78	12.00	364296.73	584270.28	N 32 0 5.24	W 104 11 41.40
	7700.00	88.95	359.56	7380.68	271.99	269.73	-103.08	0.00	364333.73	584269.99	N 32 0 5.61	W 104 11 41.40
	7800.00	88.95	359.56	7382.51	371.96	369.71	-103.84	0.00	364433.70	584269.23	N 32 0 6.60	W 104 11 41.41
	7900.00	88.95	359.56	7384.33	471.93	469.69	-104.61	0.00	364533.67	584268.46	N 32 0 7.59	W 104 11 41.42
	8000.00	88.95	359.56	7386.16	571.90	569.68	-105.37	0.00	364633.64	584267.70	N 32 0 8.58	W 104 11 41.42
	8100.00	88.95	359.56	7387.98	671.87	669.66	-106.14	0.00	364733.61	584266.93	N 32 0 9.57	W 104 11 41.43
	8200.00	88.95	359.56	7389.81	771.85	769.64	-106.90	0.00	364833.59	584266.17	N 32 0 10.56	W 104 11 41.44
	8300.00	88.95	359.56	7391.64	871.82	869.62	-107.67	0.00	364933.56	584265.40	N 32 0 11.54	W 104 11 41.45
	8400.00	88.95	359.56	7393.46	971.79	969.60	-108.43	0.00	365033.53	584264.64	N 32 0 12.53	W 104 11 41.45
	8500.00	88.95	359.56	7395.29	1071.76	1069.58	-109.19	0.00	365133.50	584263.87	N 32 0 13.52	W 104 11 41.46
	8600.00	88.95	359.56	7397.11	1171.74	1169.56	-109.96	0.00	365233.47	584263.11	N 32 0 14.51	W 104 11 41.47
	8700.00	88.95	359.56	7398.94	1271.71	1269.54	-110.73	0.00	365333.44	584262.34	N 32 0 15.50	W 104 11 41.48
	8800.00	88.95	359.56	7400.77	1371.68	1369.52	-111.49	0.00	365433.41	584261.58	N 32 0 16.49	W 104 11 41.48
	8900.00	88.95	359.56	7402.59	1471.65	1469.50	-112.26	0.00	365533.39	584260.81	N 32 0 17.48	W 104 11 41.49
	9000.00	88.95	359.56	7404.42	1571.63	1569.48	-113.02	0.00	365633.36	584260.05	N 32 0 18.47	W 104 11 41.50
	9100.00	88.95	359.56	7406.24	1671.60	1669.46	-113.79	0.00	365733.33	584259.28	N 32 0 19.46	W 104 11 41.51
	9200.00	88.95	359.56	7408.07	1771.57	1769.44	-114.55	0.00	365833.30	584258.52	N 32 0 20.45	W 104 11 41.52
	9300.00	88.95	359.56	7409.90	1871.54	1869.42	-115.32	0.00	365933.27	584257.75	N 32 0 21.44	W 104 11 41.52
	9400.00	88.95	359.56	7411.72	1971.51	1969.40	-116.08	0.00	366033.24	584256.99	N 32 0 22.43	W 104 11 41.53
	9500.00	88.95	359.56	7413.55	2071.49	2069.38	-116.85	0.00	366133.21	584256.22	N 32 0 23.42	W 104 11 41.53
	9600.00	88.95	359.56	7415.38	2171.46	2169.36	-117.61	0.00	366233.18	584255.46	N 32 0 24.41	W 104 11 41.54
	9700.00	88.95	359.56	7417.20	2271.43	2269.34	-118.38	0.00	366333.16	584254.69	N 32 0 25.40	W 104 11 41.55
	9800.00	88.95	359.56	7419.03	2371.40	2369.32	-119.14	0.00	366433.13	584253.93	N 32 0 26.38	W 104 11 41.56
	9900.00	88.95	359.56	7420.86	2471.38	2469.30	-119.91	0.00	366533.10	584253.16	N 32 0 27.37	W 104 11 41.56
	10000.00	88.95	359.56	7422.68	2571.35	2569.28	-120.67	0.00	366633.07	584252.40	N 32 0 28.36	W 104 11 41.57
	10100.00	88.95	359.56	7424.51	2671.32	2669.26	-121.44	0.00	366733.04	584251.63	N 32 0 29.35	W 104 11 41.58
	10200.00	88.95	359.56	7426.34	2771.29	2769.24	-122.20	0.00	366833.01	584250.87	N 32 0 30.34	W 104 11 41.59
	10300.00	88.95	359.56	7428.17	2871.26	2869.22	-122.97	0.00	366932.98	584250.10	N 32 0 31.33	W 104 11 41.59
	10400.00	88.95	359.56	7429.99	2971.24	2969.20	-123.73	0.00	367032.95	584249.34	N 32 0 32.32	W 104 11 41.60
	10500.00	88.95	359.56	7431.82	3071.21	3069.18	-124.50	0.00	367132.93	584248.57	N 32 0 33.31	W 104 11 41.61
	10600.00	88.95	359.56	7433.65	3171.18	3169.17	-125.26	0.00	367232.90	584247.81	N 32 0 34.30	W 104 11 41.62
	10700.00	88.95	359.56	7435.48	3271.15	3269.15	-126.03	0.00	367332.87	584247.04	N 32 0 35.29	W 104 11 41.62
	10800.00	88.95	359.56	7437.30	3371.13	3369.13	-126.79	0.00	367432.84	584246.28	N 32 0 36.28	W 104 11 41.63
	10900.00	88.95	359.56	7439.13	3471.10	3469.11	-127.56	0.00	367532.81	584245.51	N 32 0 37.27	W 104 11 41.64
	11000.00	88.95	359.56	7440.96	3571.07	3569.09	-128.32	0.00	367632.78	584244.75	N 32 0 38.26	W 104 11 41.65
	11100.00	88.95	359.56	7442.79	3671.04	3669.07	-129.09	0.00	367732.75	584243.98	N 32 0 39.25	W 104 11 41.65
	11200.00	88.95	359.56	7444.61	3771.02	3769.05	-129.85	0.00	367832.73	584243.22	N 32 0 40.24	W 104 11 41.66
	11300.00	88.95	359.56	7446.44	3870.99	3869.03	-130.62	0.00	367932.70	584242.45	N 32 0 41.23	W 104 11 41.67
	11400.00	88.95	359.56	7448.27	3970.96	3969.01	-131.38	0.00	368032.67	584241.69	N 32 0 42.22	W 104 11 41.68
	11500.00	88.95	359.56	7450.10	4070.93	4068.99	-132.15	0.00	368132.64	584240.92	N 32 0 43.20	W 104 11 41.68
	11600.00	88.95	359.56	7451.92	4170.90	4168.97	-132.91	0.00	368232.61	584240.16	N 32 0 44.19	W 104 11 41.69
	11700.00	88.95	359.56	7453.75	4270.88	4268.95	-133.68	0.00	368332.58	584239.39	N 32 0 45.18	W 104 11 41.70
	11800.00	88.95	359.56	7455.58	4370.85	4368.93	-134.44	0.00	368432.55	584238.63	N 32 0 46.17	W 104 11 41.71
	11900.00	88.95	359.56	7457.41	4470.82	4468.91	-135.21	0.00	368532.52	584237.86	N 32 0 47.16	W 104 11 41.71
	12000.00	88.95	359.56	7459.24	4570.79	4568.89	-135.97	0.00	368632.50	584237.10	N 32 0 48.15	W 104 11 41.72
	12100.00	88.95	359.56	7461.06	4670.77	4668.87	-136.74	0.00	368732.47	584236.33	N 32 0 49.14	W 104 11 41.73
	12200.00	88.95	359.56	7462.89	4770.74	4768.85	-137.50	0.00	368832.44	584235.57	N 32 0 50.13	W 104 11 41.73
	12300.00	88.95	359.56	7464.72	4870.71	4868.83	-138.27	0.00	368932.41	584234.80	N 32 0 51.12	W 104 11 41.74
	12400.00	88.95	359.56	7466.55	4970.68	4968.81	-139.03	0.00	369032.38	584234.04	N 32 0 52.11	W 104 11 41.75
	12500.00	88.95	359.56	7468.38	5070.65	5068.79	-139.80	0.00	369132.35	584233.28	N 32 0 53.10	W 104 11 41.76
	12600.00	88.95	359.56	7470.21	5170.63	5168.77	-140.56	0.00	369232.32	584232.51	N 32 0 54.09	W 104 11 41.76
	12700.00	88.95	359.56	7472.04	5270.60	5268.75	-141.33	0.00	369332.29	584231.75	N 32 0 55.08	W 104 11 41.77
	12800.00	88.95	359.56	7473.86	5370.57	5368.73	-142.09	0.00	369432.27	584230.98	N 32 0 56.07	W 104 11 41.78
	12900.00	88.95	359.56	7475.69	5470.54	5468.71	-142.86	0.00	369532.24	584230.22	N 32 0 57.06	W 104 11 41.79
	13000.00	88.95	359.56	7477.52	5570.52	5568.69	-143.62	0.00	369632.21	584229.45	N 32 0 58.05	W 104 11 41.79
	13100.00	88.95	359.56	7479.35	5670.49	5668.67	-144.39	0.00	369732.18	584228.69	N 32 0 59.03	W 104 11 41.80

Comments	MD (ft)	Incl (°)	Azirm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (%/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S °.′.″)	Longitude (E/W °.′.″)
	13200.00	88.95	359.56	7481.78	5770.46	5768.65	-145.15	0.00	369832.15	584227.92	N 32 1 0.02	W 104 11 41.81
	13300.00	88.95	359.56	7483.01	5870.43	5868.64	-145.92	0.00	369932.12	584227.16	N 32 1 1.01	W 104 11 41.82
	13400.00	88.95	359.56	7484.84	5970.40	5968.62	-146.68	0.00	370032.09	584226.39	N 32 1 2.00	W 104 11 41.82
	13500.00	88.95	359.56	7486.67	6070.38	6068.60	-147.45	0.00	370132.06	584225.63	N 32 1 2.99	W 104 11 41.83
	13600.00	88.95	359.56	7488.50	6170.35	6168.58	-148.21	0.00	370232.04	584224.86	N 32 1 3.98	W 104 11 41.84
	13700.00	88.95	359.56	7490.33	6270.32	6268.56	-148.98	0.00	370332.01	584224.10	N 32 1 4.97	W 104 11 41.85
	13800.00	88.95	359.56	7492.15	6370.29	6368.54	-149.74	0.00	370431.98	584223.33	N 32 1 5.96	W 104 11 41.85
	13900.00	88.95	359.56	7493.98	6470.27	6468.52	-150.51	0.00	370531.95	584222.57	N 32 1 6.95	W 104 11 41.86
	14000.00	88.95	359.56	7495.81	6570.24	6568.50	-151.27	0.00	370631.92	584221.80	N 32 1 7.94	W 104 11 41.87
	14100.00	88.95	359.56	7497.64	6670.21	6668.48	-152.04	0.00	370731.89	584221.04	N 32 1 8.93	W 104 11 41.88
	14200.00	88.95	359.56	7499.47	6770.18	6768.46	-152.80	0.00	370831.86	584220.27	N 32 1 9.92	W 104 11 41.88
Cimarex Klein 33 Federal Com 7H PBHL	14228.82	88.95	359.56	7500.00	6799.00	6797.28	-153.02	0.00	370860.68	584220.05	N 32 1 10.20	W 104 11 41.88

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	14228.825	1/100.000	30.000	30.000		SLB_MWD-STD	Original Borehole / Cimarex Klein 33 Federal Com 7H Rev4 OPB 30-