Must be in compliance with NMOCD Rule 5.9 prior to transporting/selling product.

UNORTHODOX LOCATION

OCD Artes

JES 4-21-2014

Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL: NMNM114350; BHL: NMNM117116

6. If Indian, Allotee or Tribe Name

1a. Type of Work: [X] DRILL [ ] REENTER

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

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.
Medwick 29 Federal Com #6H <40450>

2. Name of Operator
Cimarex Energy Co. <215099>

9. API Well No.
30-015-42328

3a. Address
202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103

3b. Phone No. *(include area code)*
918-585-1100

10. Field and Pool, or Exploratory
G-08 S252636M; B.S <97838>
Wildcat, Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At Surface: 210 FNL & 1470 FWL; Sec 29, 26S, 27E
At proposed prod. Zone: 330 FSL & 2020 FWL; Sec. 32, 26S, 27E *Bone Spring*

11. Sec,. T. R. M. or Blk. and Survey and Area
29, 26E, 27E

14. Distance in miles and direction from nearest town or post office*
38.2 miles to Carlsbad, NM

12. County or Parish: Eddy

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any)
210

16. No of acres in lease
NMNM114350=1200.00 acres
NMNM117116=1365.00 acres

17. Spacing Unit dedicated to this well
223.13

18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft.
40' to the #5H

19. Proposed Depth
Pilot Hole TD: 7,950
14,150 MD 7,411 TVD

20. BLM/BIA Bond No. on File
NM2575; NMB000835

RECEIVED
APR 21 2014
NMOCD ARTESIA

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3250 GR

22. Approximate date work will start*
3/31/14

23. Estimated duration
35 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands , the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator Certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature: Hope Knauls
Name *(Printed/Typed)*: Hope Knauls
Date: 10/31/13

Title: Regulatory Compliance

Approved By *(Signature)*: /S/ STEPHEN J. CAFFEY
Name *(Printed/Typed)*:
Date: APR 12 2014

Title: FIELD MANAGER
Office: CARLSBAD FIELD OFFICE

Application approval 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.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.S. 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.

Approval Subject to General Requirements & Special Stipulations Attached

(Continued on page 2)

(Instructions on page 2)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Carlsbad Controlled Water Basin

Operator Certification Statement
Medwick 29 Federal Com #6H
Cimarex Energy Co.
UL: C, Sec. 29, 26E, 27E
Eddy Co., NM

Operator's Representative
Cimarex Energy Co. of Colorado
600 N. Marienfeld St., Ste. 600
Midland, TX 79701
Office Phone: (432) 571-7800

CERTIFICATION: I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 30 day of October, 2013

NAME: Aricka Easterling

Aricka Easterling
TITLE: Regulatory Compliance
ADDRESS: 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103
TELEPHONE: 918-585-1100
EMAIL: AEasterling@cimarex.com
Field Representative: Same as above

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

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	[2] Pool Code	[3] Pool Name
30-015 42328	97818	WILDCAT G-03 S252635M; BS Wildcat Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
40450	MEDWICK 29 FEDERAL COM.	6H

[7] OGRID No.	[8] Operator Name	[9] Elevation
215099	CIMAREX ENERGY CO.	3250'

[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
C	29	26S	27E		210	NORTH	1470	WEST	EDDY

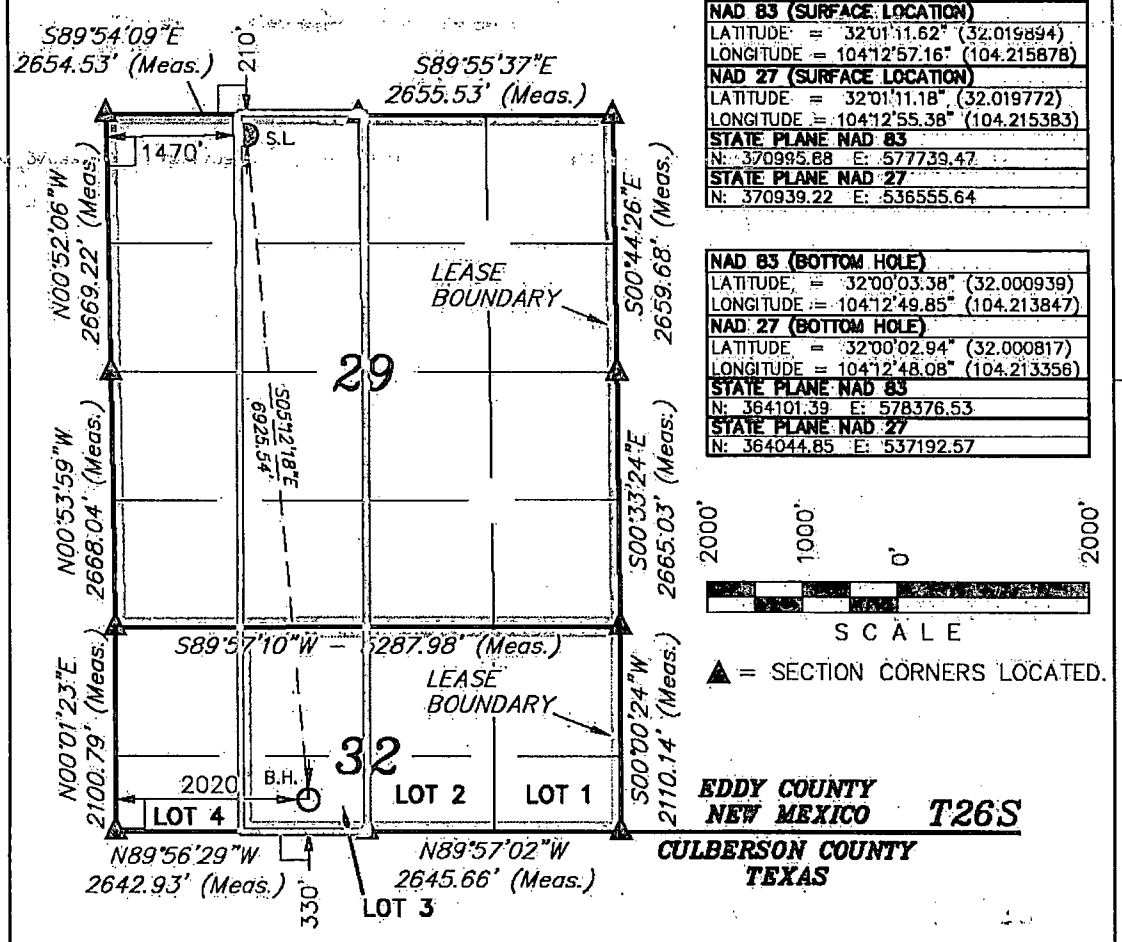
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	32	26S	27E	3	330	SOUTH	2020	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
233.13			NSL Pending

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.

[16]



NAD 83 (SURFACE LOCATION)
LATITUDE = 32°01'11.62" (32.019894)
LONGITUDE = 104°12'57.16" (104.215878)
NAD 27 (SURFACE LOCATION)
LATITUDE = 32°01'11.18" (32.019772)
LONGITUDE = 104°12'55.38" (104.215383)
STATE PLANE NAD 83
N: 370995.68 E: 577739.47
STATE PLANE NAD 27
N: 370939.22 E: 536555.64

NAD 83 (BOTTOM HOLE)
LATITUDE = 32°00'03.38" (32.000939)
LONGITUDE = 104°12'49.85" (104.213847)
NAD 27 (BOTTOM HOLE)
LATITUDE = 32°00'02.94" (32.000817)
LONGITUDE = 104°12'48.08" (104.213356)
STATE PLANE NAD 83
N: 364101.39 E: 578376.53
STATE PLANE NAD 27
N: 364044.85 E: 537192.57

2000' 1000' 0' 2000'

SCALE

▲ = SECTION CORNERS LOCATED.

[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.

Hope Knauls 10/29/13
Signature Date

Hope Knauls
Printed Name

hknauls@cimarex.com
E-mail Address

[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 28, 2013
Date of Survey

Signature and Seal of Professional Surveyor:

PROFESSIONAL SURVEYOR
NEW MEXICO
17946
09-26-13
NELSON J. MARSHALL

Certificate Number:

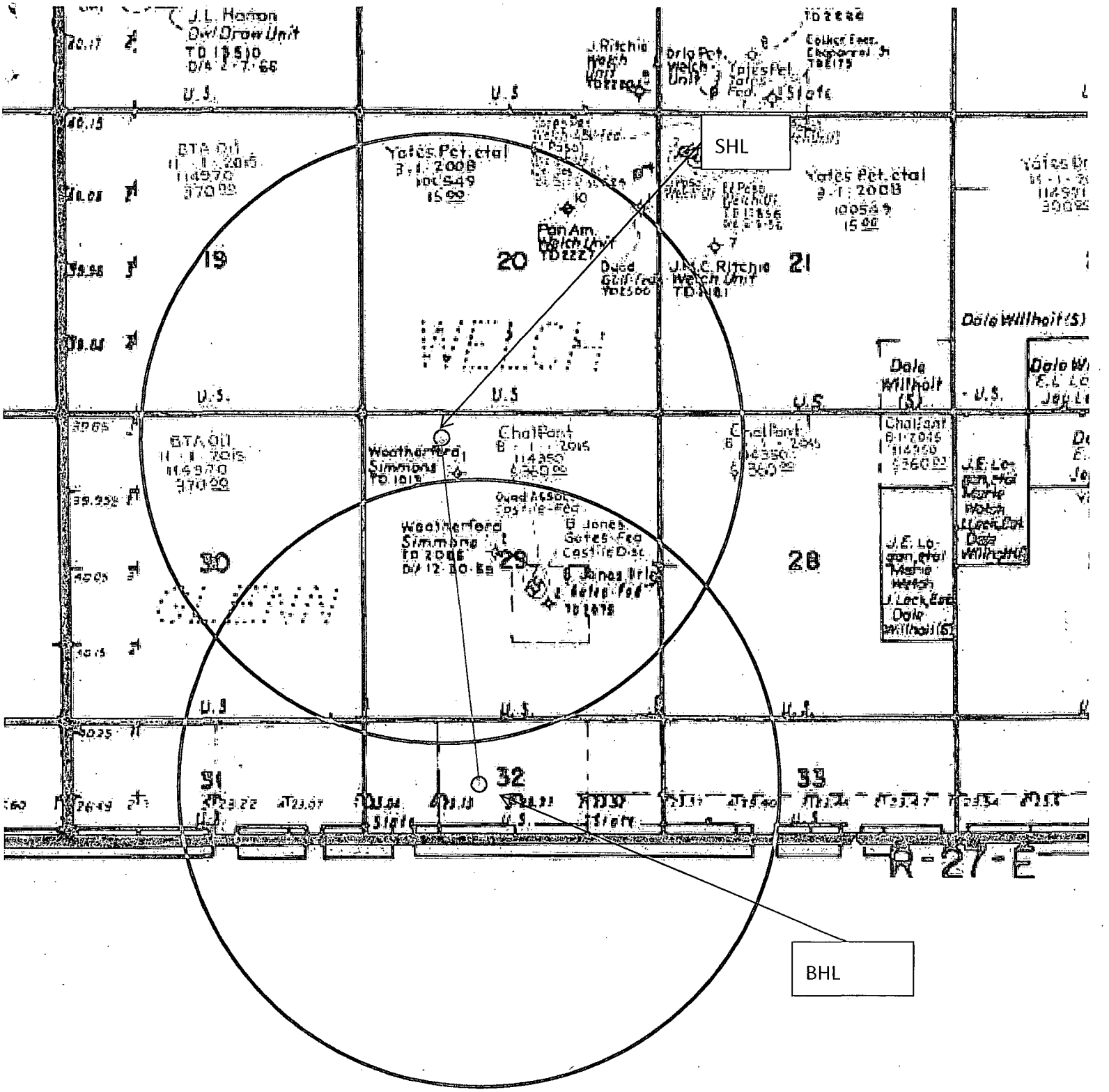


Exhibit A – One Mile Radius Map

Medwick 29 Fed Com 6H

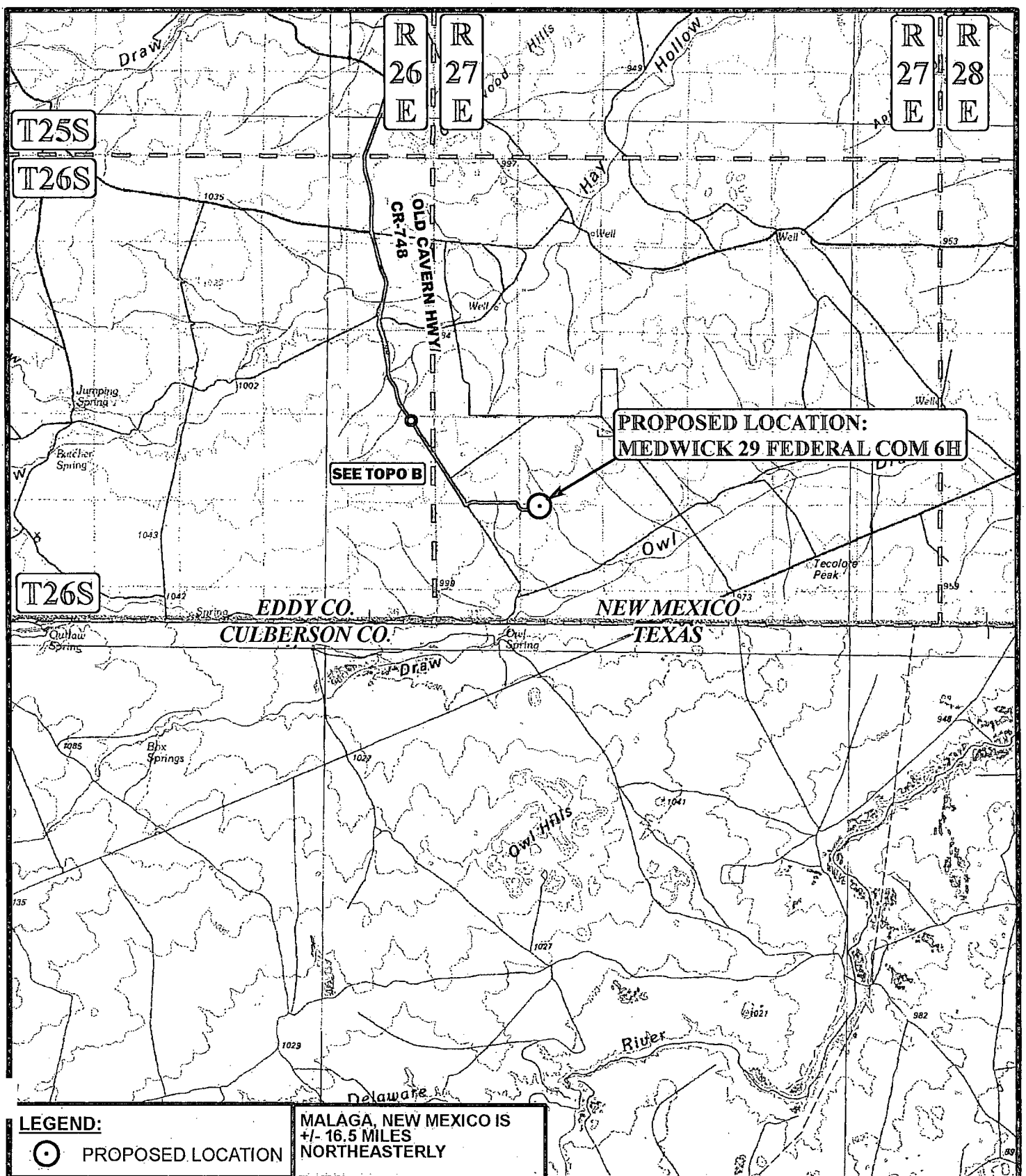
Cimarex Energy Co.

29-26S-27E

SHL 210 FNL & 1470 FWL

BHL 330 FSL & 2020 FWL

Eddy County, NM



LEGEND:

⊙ PROPOSED LOCATION

MALAGA, NEW MEXICO IS +/- 16.5 MILES NORTHEASTERLY

SCALE: 1:100,000	REVISED: 09-23-13	
DRAWN BY: J.L.H.	REVISED: 10-09-13	
DATE DRAWN: 09-03-13		

N

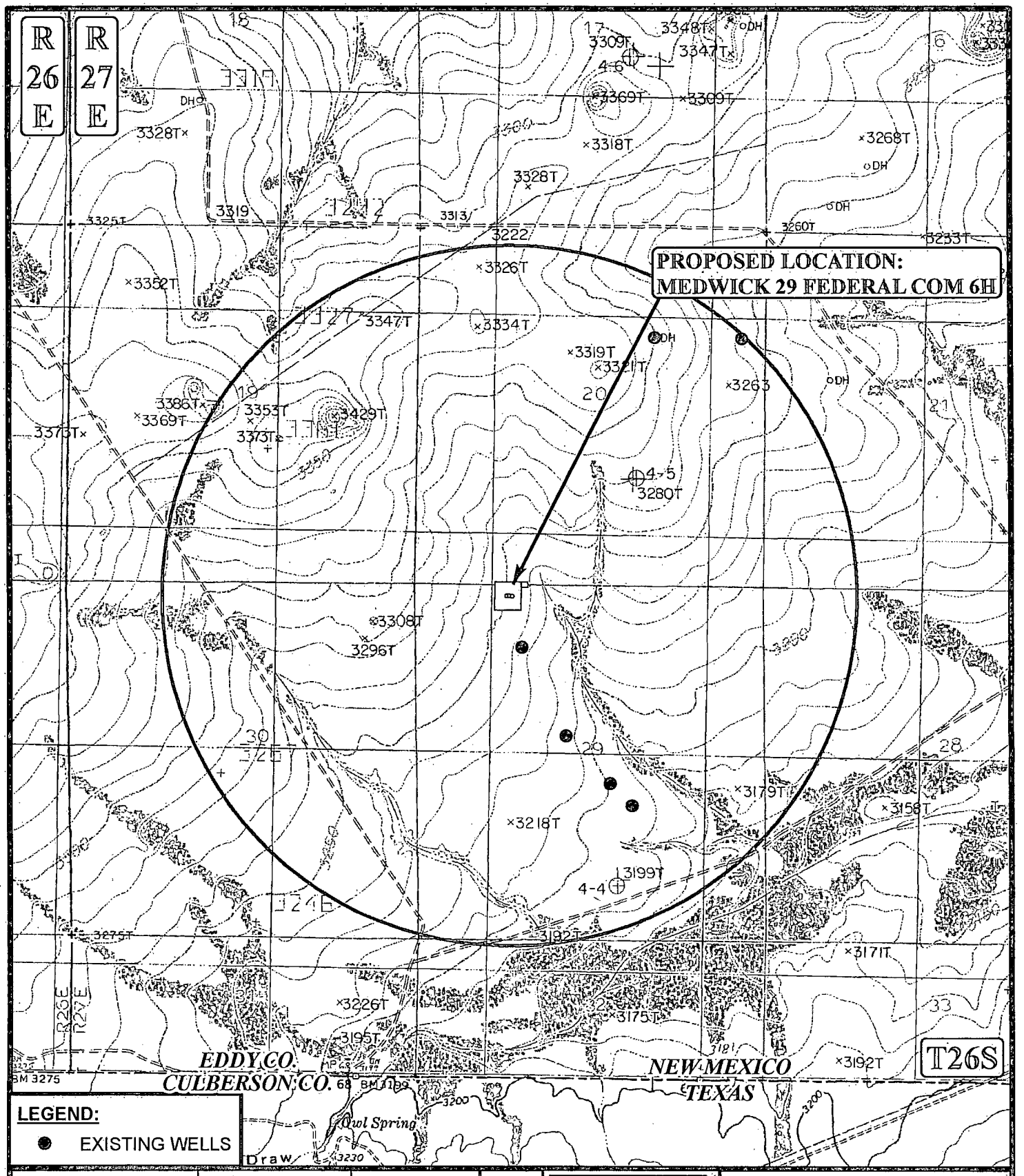
CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

ACCESS ROAD MAP | TOPO A

UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

Exhibit B



SCALE: 1" = 2000'	REVISED: 09-23-13	
DRAWN BY: J.L.H.		
DATE DRAWN: 09-03-13		

N

CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

TOPOGRAPHIC MAP — TOPO C

UINTAH ENGINEERING & LAND SURVEYING

Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

Exhibit C

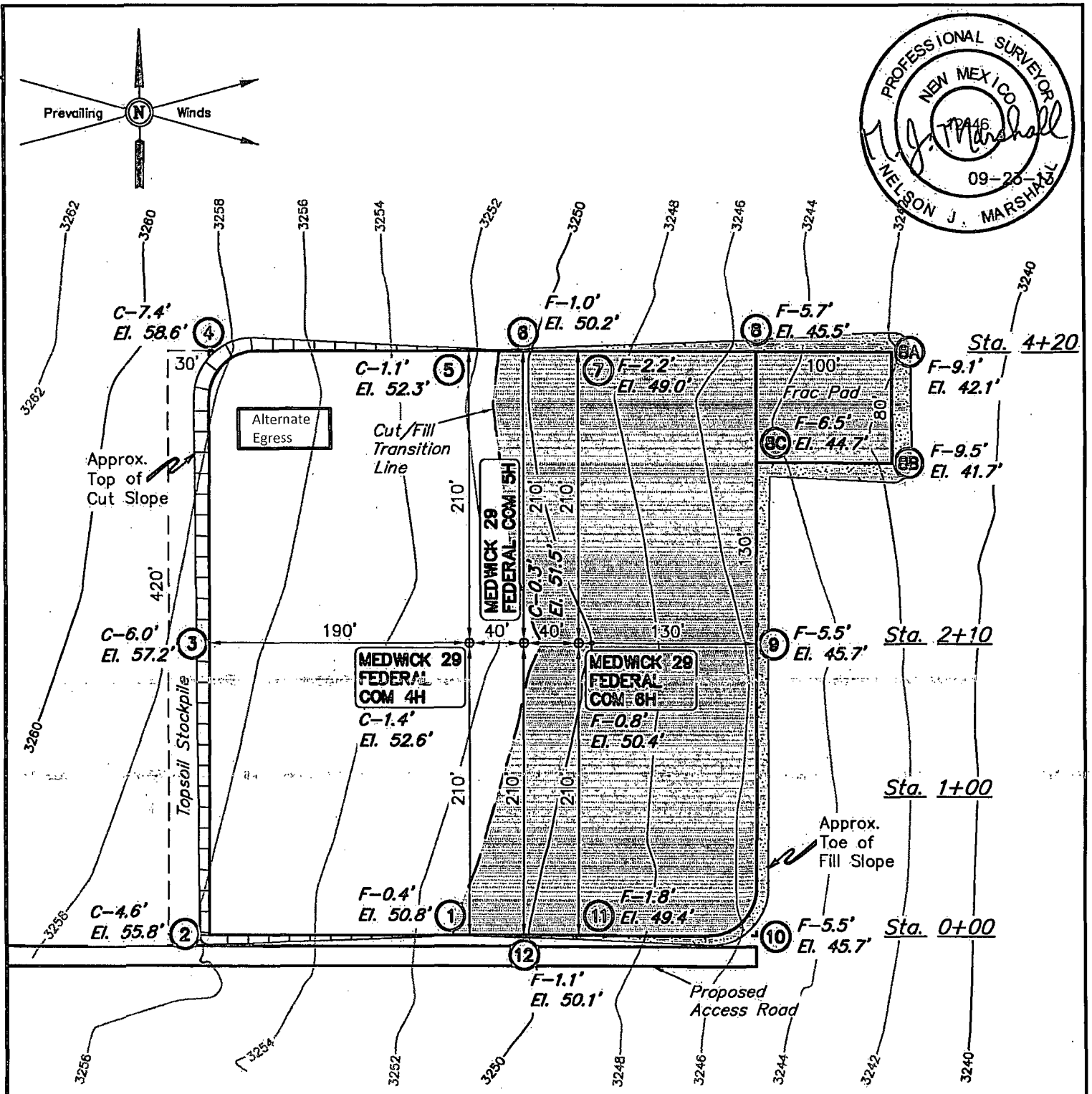


Exhibit C-1

ELEV. UNGRADED GROUND AT COM 6H LOC. STAKE = **3250.4'** FINISHED GRADE ELEV. AT COM 6H LOC. STAKE = **3251.2'**

NOTES:

- Round corners at 35' radius or as needed.
- Earthwork calculations require a fill of 0.8' @ the COM 6H location stake for balance. All fill is to be compacted to a minimum of 95% of the maximum dry density obtained by AASHTO method t-99.

CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

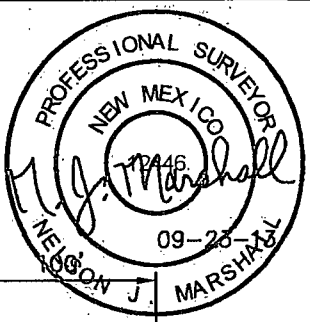
UINTAH ENGINEERING & LAND SURVEYING

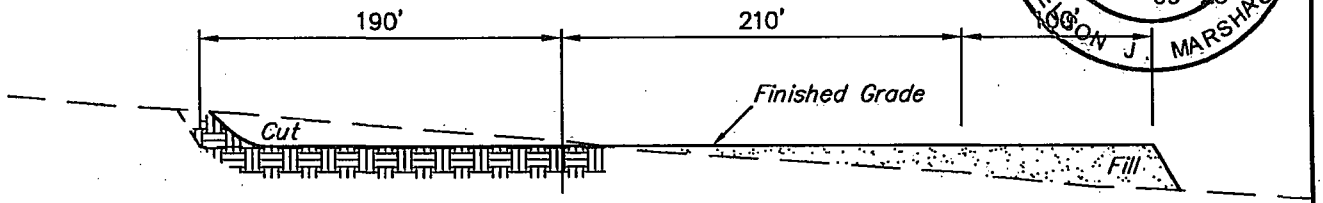
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 100'	
DATE: 09-04-13	REVISED: 09-23-13	

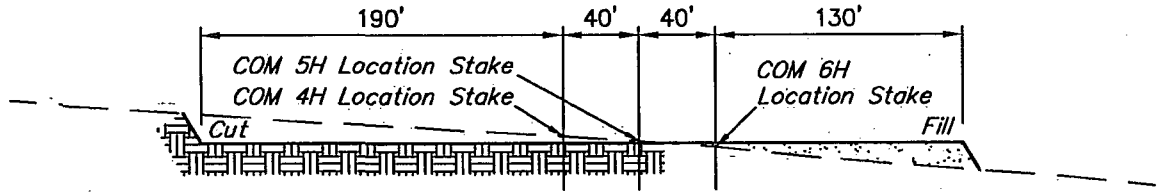
LOCATION LAYOUT | FIGURE #1

1" = 40'
X-Section Scale
1" = 100'

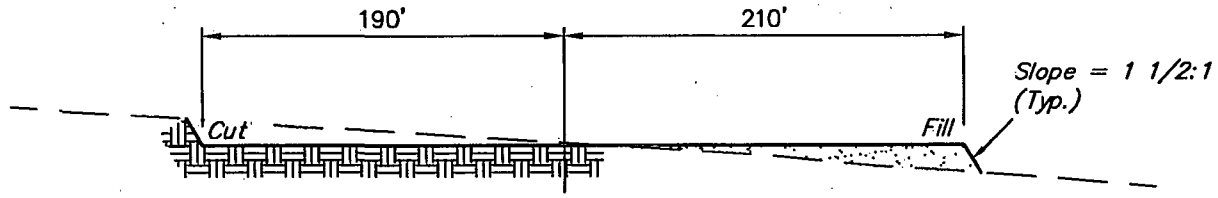




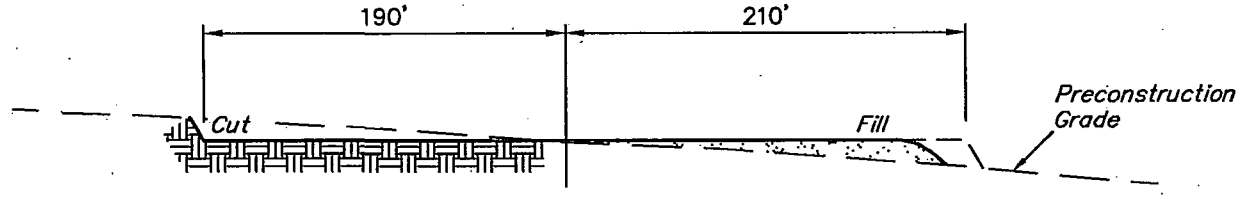
Sta. 4+20



Sta. 2+10



Sta. 1+00



Sta. 0+00

APPROXIMATE EARTHWORK QUANTITIES	
(2") TOPSOIL STRIPPING	1,170 Cu. Yds.
REMAINING LOCATION	11,580 Cu. Yds.
TOTAL CUT	**12,750 Cu. Yds.**
FILL	**11,580 Cu. Yds.**
EXCESS MATERIAL	1,170 Cu. Yds.
TOPSOIL	1,170 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	**0 Cu. Yds.**

APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	**ACRES**
WELL SITE DISTURBANCE	N/A	±4.555
30' WIDE ACCESS ROAD R-O-W DISTURBANCE	±5084.17'	±3.501
10' WIDE PIPELINE R-O-W DISTURBANCE	±765.11'	±0.176
TOTAL SURFACE USE AREA	**±5849.28'**	**±8.232**

NOTES:
- Fill quantity includes 5% for compaction.
- Topsoil should not be stripped below finished grade on substructure area.

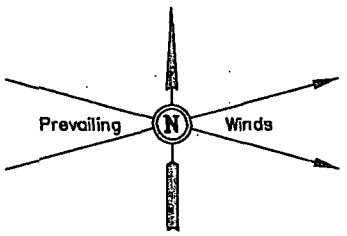
CIMAREX ENERGY CO.

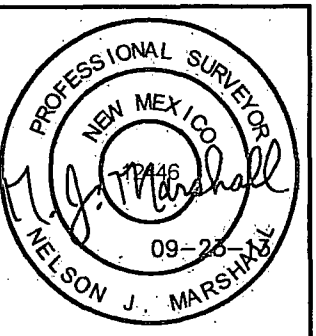
MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

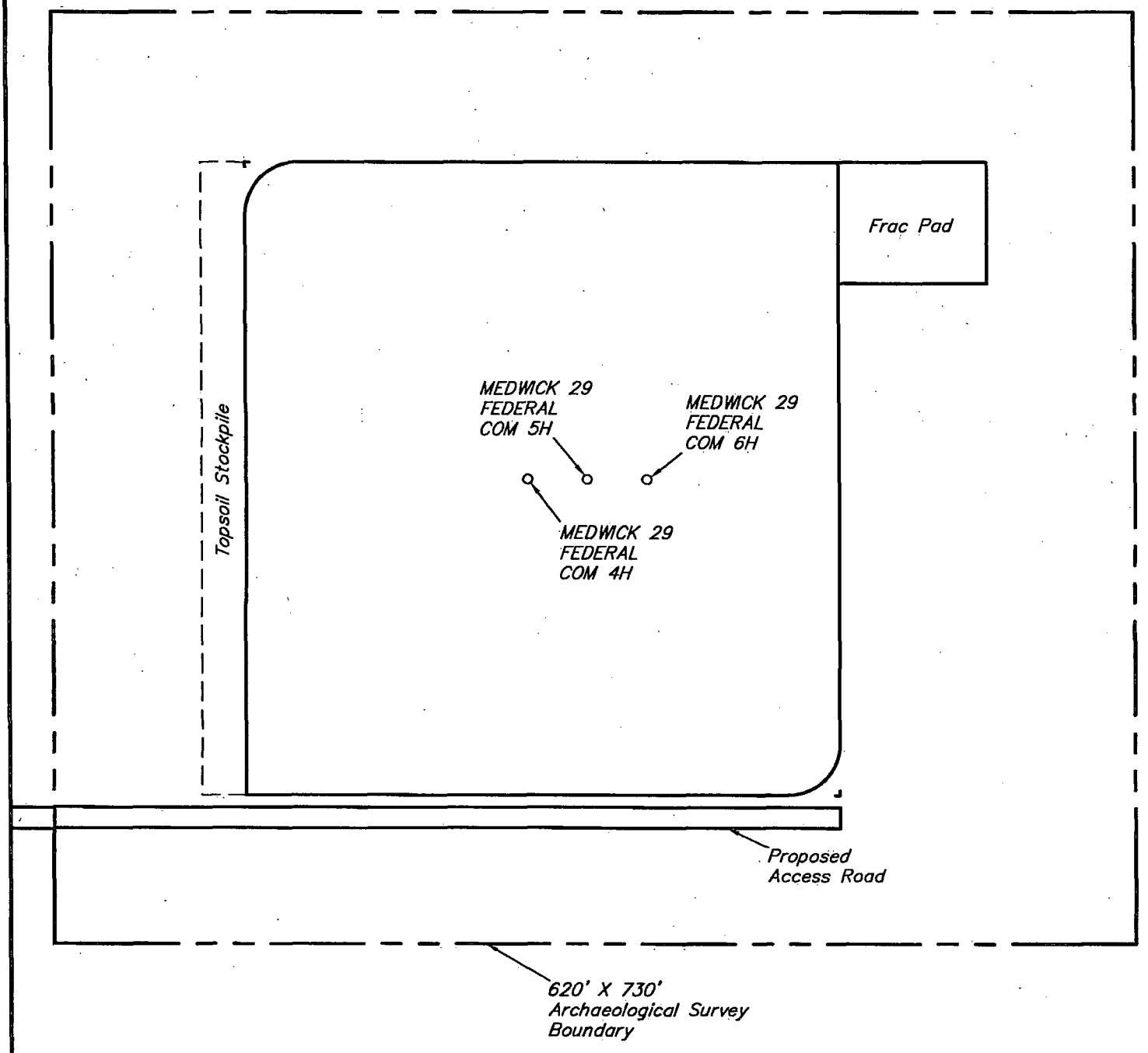
UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: AS SHOWN	
DATE: 09-04-13	REVISED: 09-23-13	

TYPICAL CROSS SECTIONS — FIGURE #2







NOTES:

Exhibit C-1

CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING

Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 100'	
DATE: 09-04-13	REVISED: 09-23-13	

ARCHAEOLOGICAL SURVEY BOUNDARY — FIGURE #4

ROAD RIGHT–OF–WAY DESCRIPTION

A 30' WIDE RIGHT–OF–WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NE 1/4 NW 1/4 OF SECTION 30, T26S, R27E, N.M.P.M., WHICH BEARS S70°39'40"W 608.72' FROM THE NORTH 1/4 CORNER OF SAID SECTION 30, THENCE N56°07'17"E 332.54'; THENCE N73°00'53"E 8.82'; THENCE S89°45'14"E 290.11' TO A POINT ON THE EAST LINE OF THE NE 1/4 NW 1/4 OF SAID SECTION 30, WHICH BEARS S00°59'46"E 14.88' FROM THE NORTH 1/4 CORNER OF SAID SECTION 30, THENCE S89°45'14"E 2576.72'; THENCE S41°36'01"E 104.19'; THENCE S26°16'51"E 10.64' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 30, WHICH BEARS S00°52'06"E 102.16' FROM THE NORTHEAST CORNER OF SAID SECTION 30, THENCE S26°16'51"E 136.18'; THENCE S36°59'04"E 160.69'; THENCE S63°12'58"E 184.13'; THENCE S89°54'11"E 1280.13' TO A POINT IN THE NE 1/4 NW 1/4 OF SECTION 29, T26S, R27E, N.M.P.M., WHICH BEARS S67°36'27"W 1137.26' FROM THE NORTH 1/4 CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT–OF–WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 3.501 ACRES MORE OR LESS.

PROFESSIONAL SURVEYOR
NEW MEXICO
17078
09-23-13
NELSON J. MARSHALL

RIGHT–OF–WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM	5084.17	3.501	308.13

Sheet 1 of 4

NOTES:
- The maximum grade of existing ground for the proposed access road is ±5%.

CIMAREX ENERGY CO.

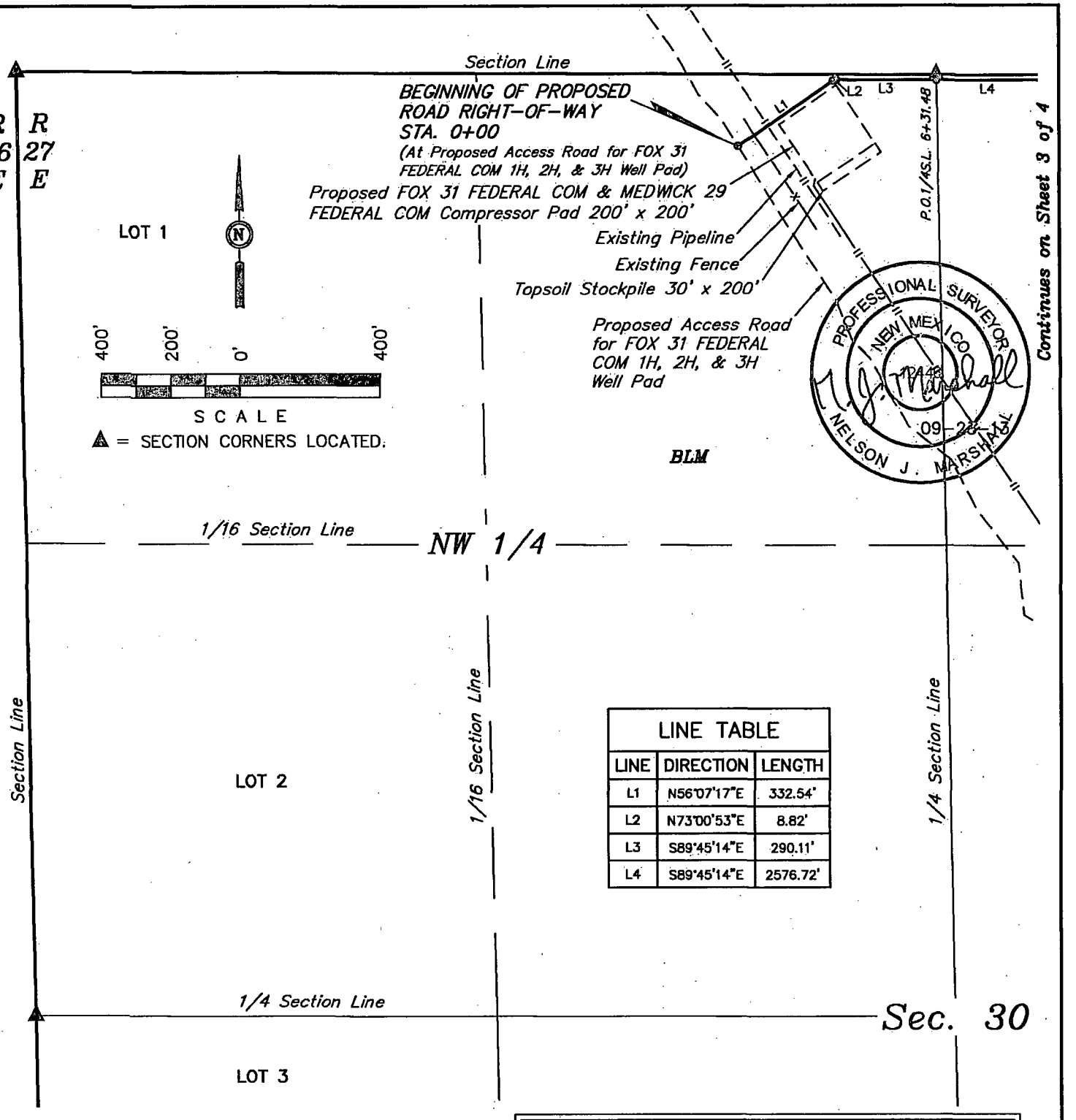
MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING

Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: N/A	
DATE: 09-04-13	REVISED: 09-23-13	

ACCESS ROAD R-O-W | FIGURE #5A



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N56°07'17"E	332.54'
L2	N73°00'53"E	8.82'
L3	S89°45'14"E	290.11'
L4	S89°45'14"E	2576.72'

BEGINNING OF ROAD STA. 0+00 BEARS S70°39'40"W 608.72' FROM THE NORTH 1/4 CORNER OF SECTION 30, T26S, R27E, N.M.P.M.

P.O.1/4S.L. 6+31.48 BEARS S00°59'46"E 14.88' FROM THE NORTH 1/4 CORNER OF SECTION 30, T26S, R27E, N.M.P.M.

RIGHT-OF-WAY LENGTHS			
DESCRIPTION	FEET	ACRES	RODS
NW 1/4 SEC 30	631.48	0.435	38.27

NOTES:
- The maximum grade of existing ground for the proposed access road is ±5%.

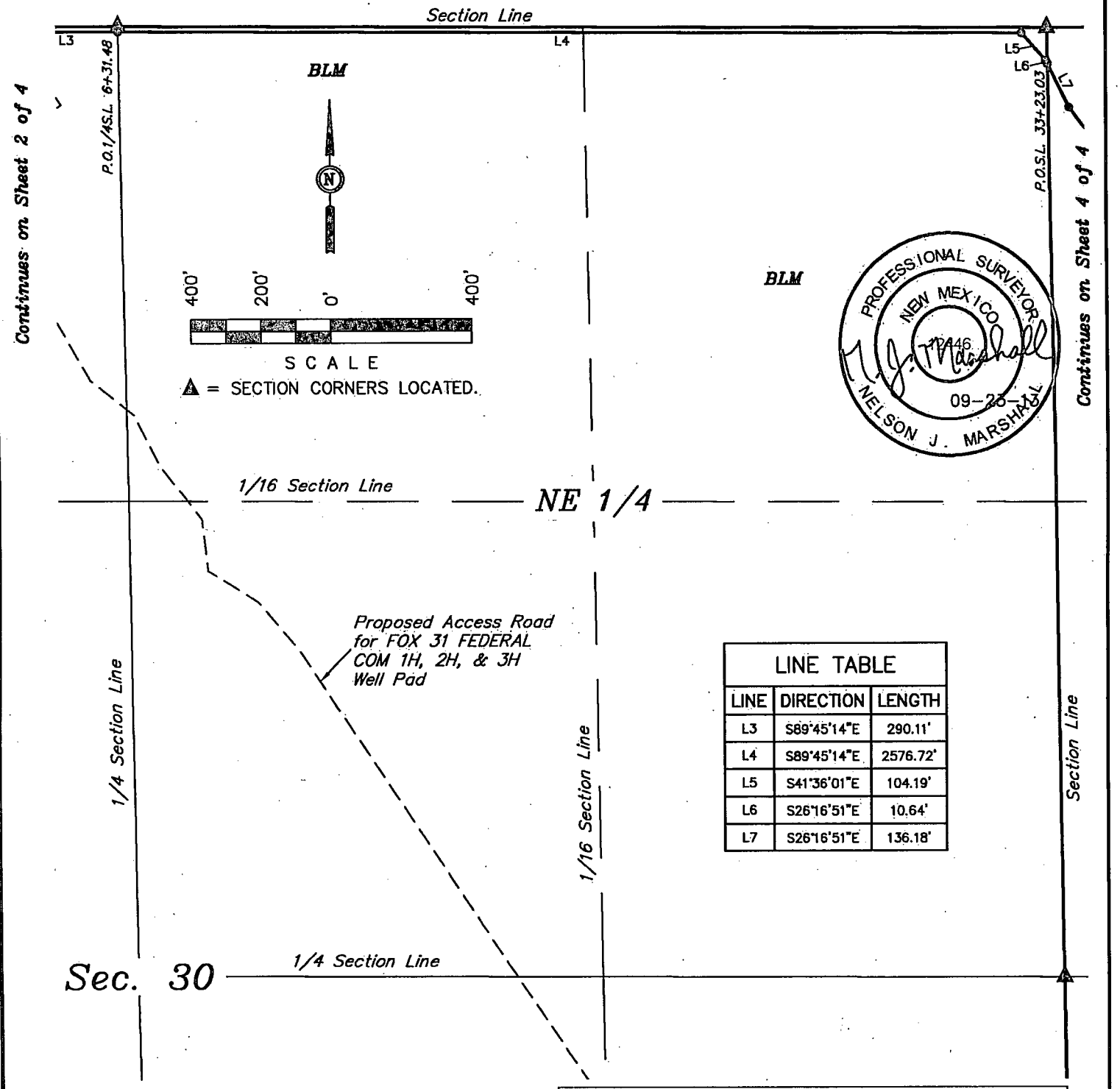
CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 400'	
DATE: 09-04-13	REVISED: 09-23-13	

ACCESS ROAD R-O-W | FIGURE #5B



LINE TABLE		
LINE	DIRECTION	LENGTH
L3	S89°45'14"E	290.11'
L4	S89°45'14"E	2576.72'
L5	S41°36'01"E	104.19'
L6	S26°16'51"E	10.64'
L7	S26°16'51"E	136.18'

P.O.1/4S.L. 6+31.48 BEARS S00°59'46"E 14.88' FROM THE NORTH 1/4 CORNER OF SECTION 30, T26S, R27E, N.M.P.M.

P.O.S.L. 33+23.03 BEARS S00°52'06"E 102.16' FROM THE NORTHEAST CORNER OF SECTION 30, T26S, R27E, N.M.P.M.

RIGHT-OF-WAY LENGTHS			
DESCRIPTION	FEET	ACRES	RODS
NE 1/4 SEC 30	2693.55	1.855	163.25

NOTES:
- The maximum grade of existing ground for the proposed access road is ±5%.

Exhibit C-1

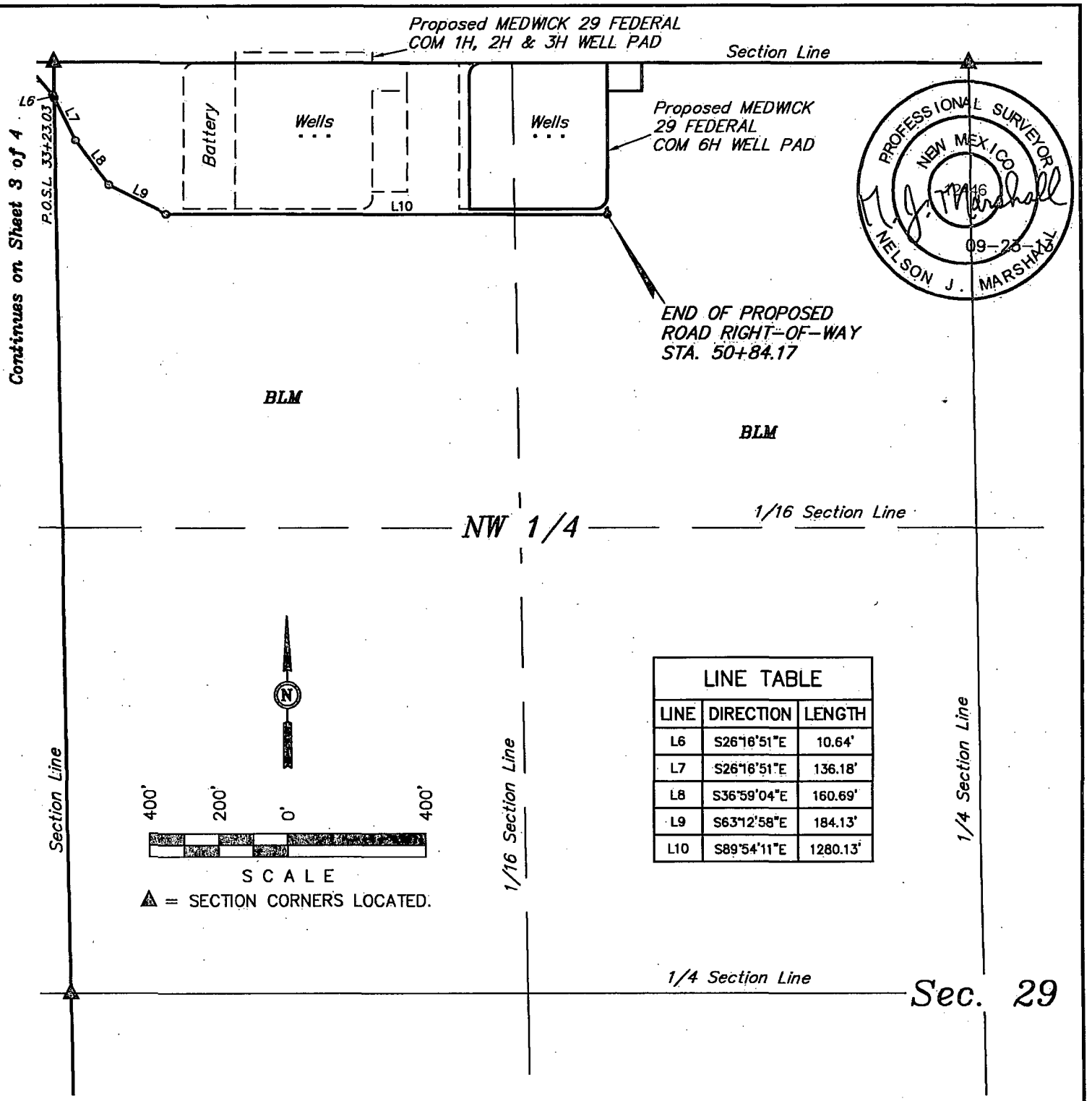
CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 400'	
DATE: 09-04-13	REVISED: 09-23-13	

ACCESS ROAD R-O-W — FIGURE #5C



LINE TABLE		
LINE	DIRECTION	LENGTH
L6	S26°16'51"E	10.64'
L7	S26°16'51"E	136.18'
L8	S36°59'04"E	160.69'
L9	S63°12'58"E	184.13'
L10	S89°54'11"E	1280.13'

P.O.S.L. 33+23.03 BEARS S00°52'06"E 102.16' FROM THE NORTHWEST CORNER OF SECTION 29, T26S, R27E, N.M.P.M.

END OF ROAD STA. 50+84.17 BEARS S67°36'27"W 1137.26' FROM THE NORTH 1/4 CORNER OF SECTION 29, T26S, R27E, N.M.P.M.

RIGHT-OF-WAY LENGTHS			
DESCRIPTION	FEET	ACRES	RODS
NW 1/4 SEC 29	1761.14	1.213	106.74

NOTES:
- The maximum grade of existing ground for the proposed access road is ±5%.

Exhibit C-1

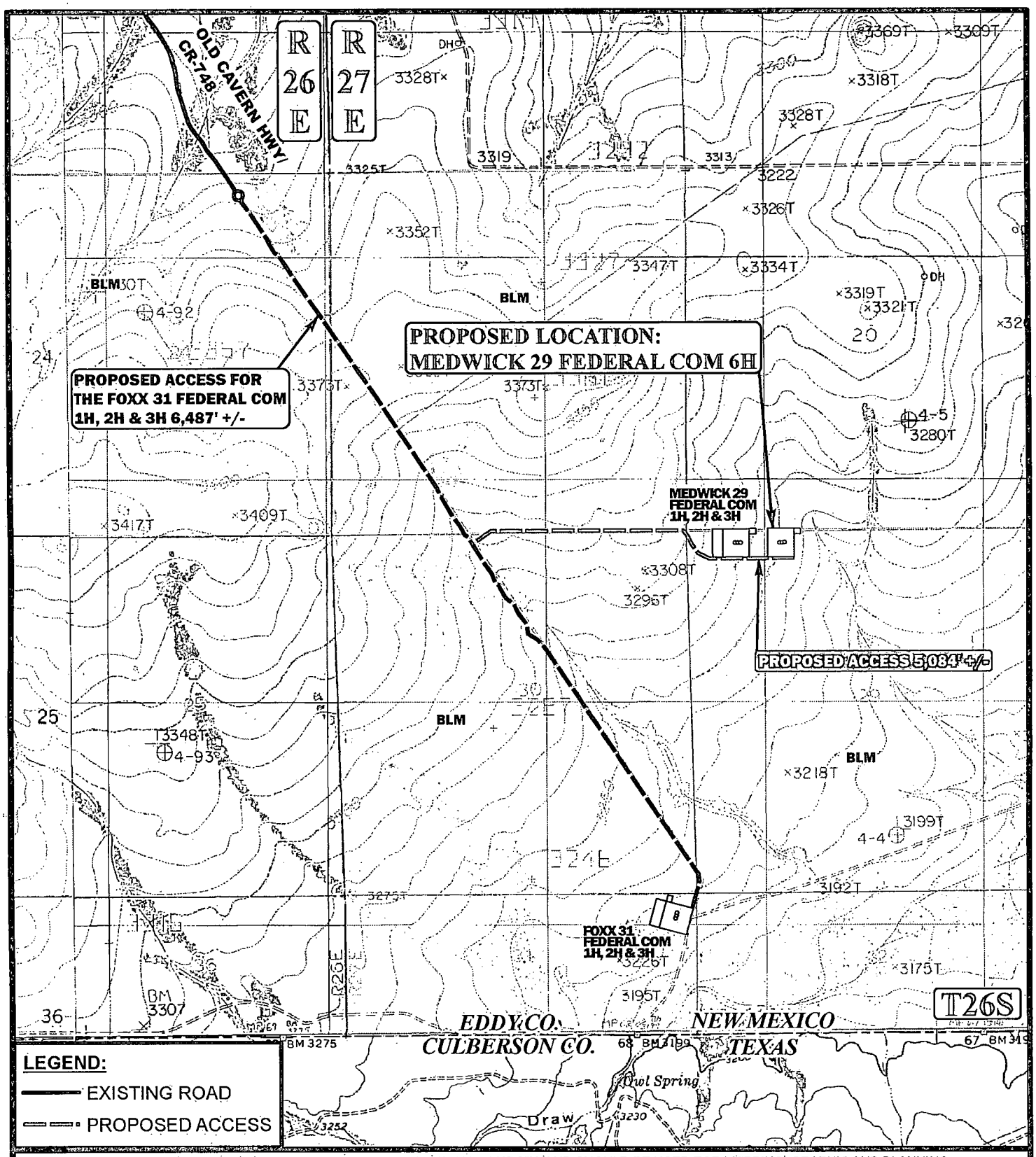
CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 400'	
DATE: 09-04-13	REVISED: 09-23-13	

ACCESS ROAD R-O-W — FIGURE #5D



*PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING & LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

SCALE: 1" = 2000'	REVISED: 09-23-13	
DRAWN BY: J.L.H.	REVISED: 10-09-13	
DATE DRAWN: 09-03-13		

N

CIMAREX ENERGY CO

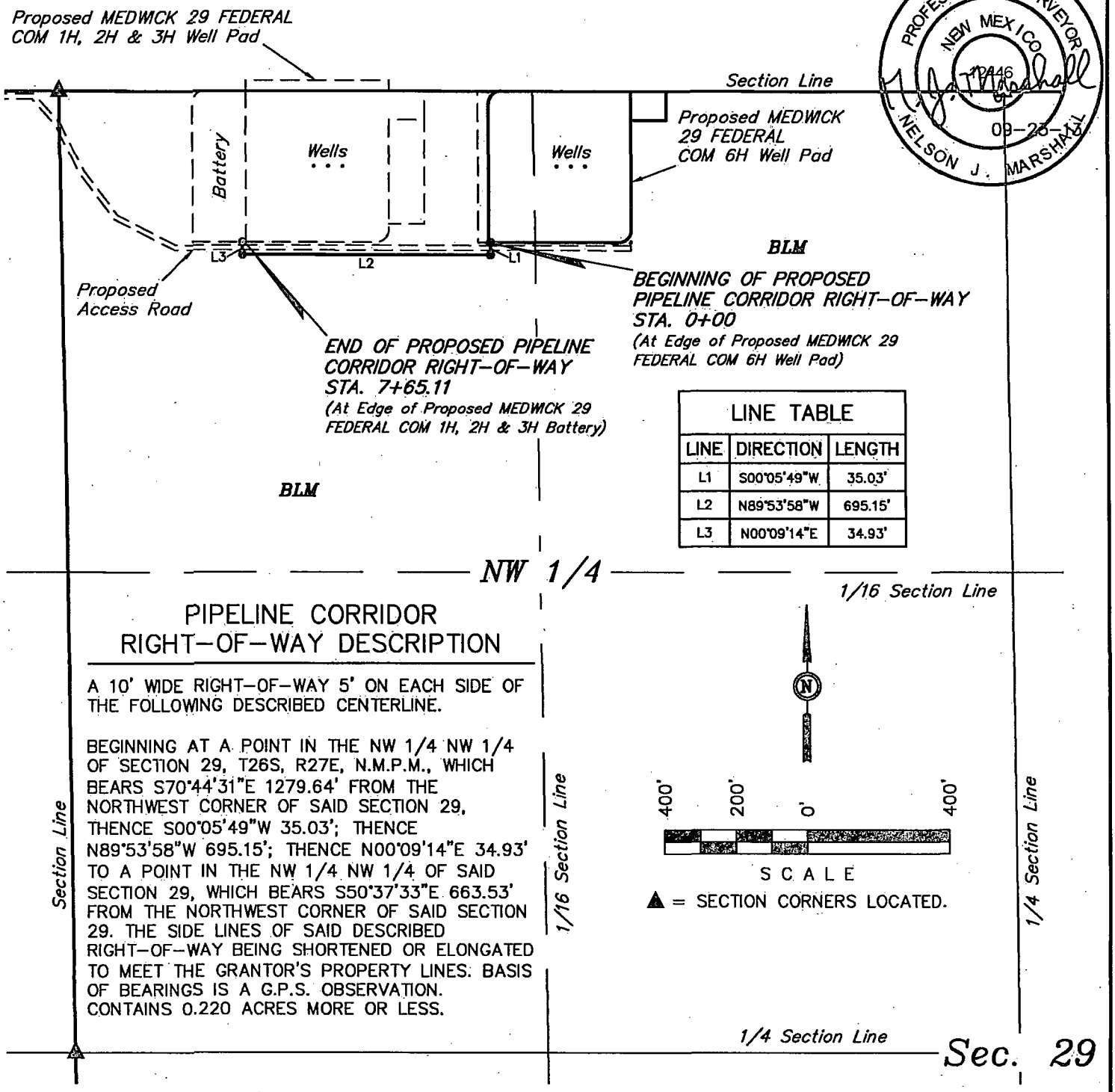
MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

ACCESS ROAD MAP | TOPO B

UINTAH ENGINEERING & LAND SURVEYING

Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

Exhibit G



PROFESSIONAL SURVEYOR NEW MEXICO 17946 NELSON J. MARSHALL 09-25-13

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S00°05'49"W	35.03'
L2	N89°53'58"W	695.15'
L3	N00°09'14"E	34.93'

PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 10' WIDE RIGHT-OF-WAY 5' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NW 1/4 NW 1/4 OF SECTION 29, T26S, R27E, N.M.P.M., WHICH BEARS S70°44'31"E 1279.64' FROM THE NORTHWEST CORNER OF SAID SECTION 29, THENCE S00°05'49"W 35.03'; THENCE N89°53'58"W 695.15'; THENCE N00°09'14"E 34.93' TO A POINT IN THE NW 1/4 NW 1/4 OF SAID SECTION 29, WHICH BEARS S50°37'33"E 663.53' FROM THE NORTHWEST CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.220 ACRES MORE OR LESS.

▲ = SECTION CORNERS LOCATED.

BEGINNING OF PIPELINE CORRIDOR STA. 0+00 BEARS S70°44'31"E 1279.64' FROM THE NORTHWEST CORNER OF SECTION 29, T26S, R27E, N.M.P.M.

END OF PIPELINE CORRIDOR STA. 7+65.11 BEARS S50°37'33"E 663.53' FROM THE NORTHWEST CORNER OF SECTION 29, T26S, R27E, N.M.P.M.

RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM	765.11	0.176	46.37

NOTES:
- The proposed pipeline corridor contains 4 lines (3 gathering lines and 1 gas lift line).

Exhibit H

CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

UINTAH ENGINEERING & LAND SURVEYING
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

DRAWN BY: J.S.	SCALE: 1" = 400'	
DATE: 09-04-13	REVISED: 09-23-13	

PIPELINE R-O-W — FIGURE #6

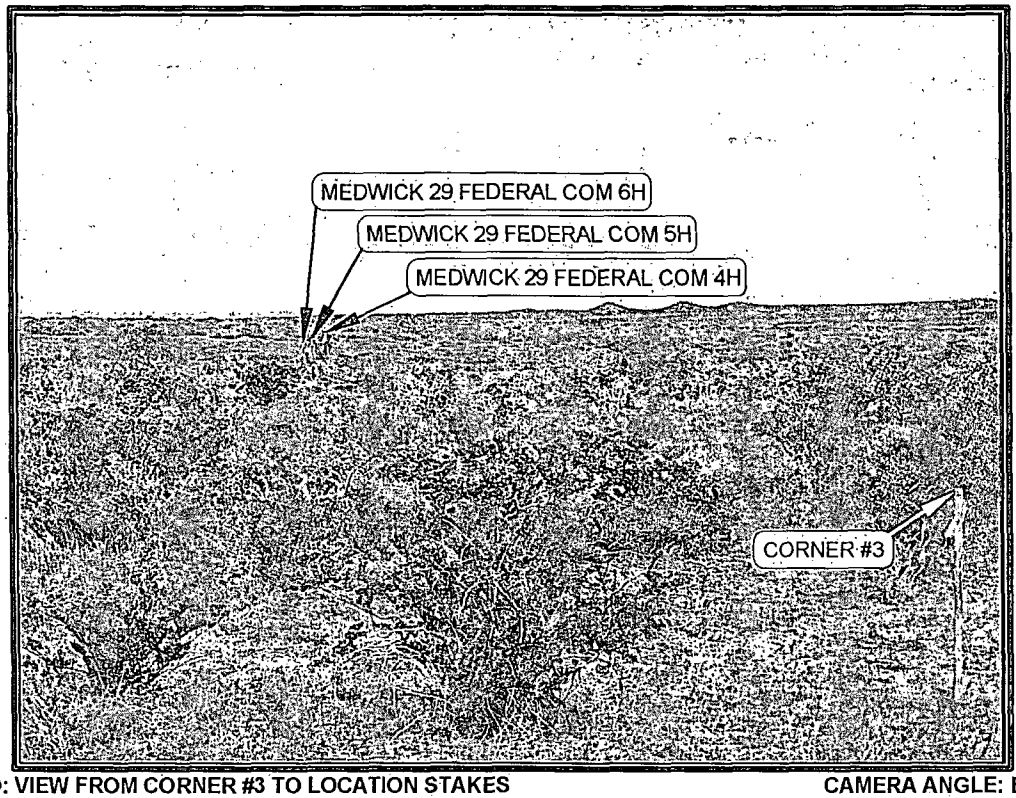


PHOTO: VIEW FROM CORNER #3 TO LOCATION STAKES

CAMERA ANGLE: EASTERLY

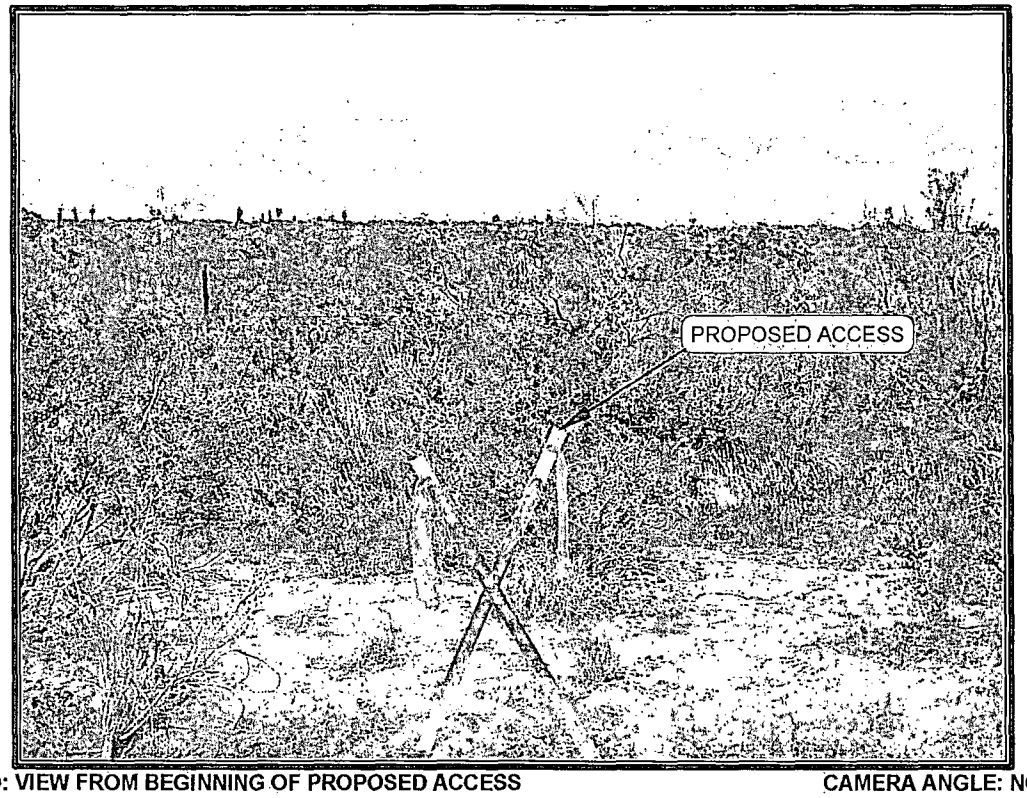


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY

NOTES:

CIMAREX ENERGY CO.

MEDWICK 29 FEDERAL COM 6H
SECTION 29, T26S, R27E, N.M.P.M.
210' FNL 1470' FWL

TAKEN BY: J.C.	DRAWN BY: J.L.H.	REVISED: 09-23-13
DATE: 08-27-13	DATE: 09-03-13	

PHOTO SHEET

UINTAH ENGINEERING & LAND SURVEYING

Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

Application to Drill

Medwick 29 Federal Com #6H

Cimarex Energy Co.

UL: C, Sec. 29, 26E, 27E

Eddy Co., NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. Location: SHL 210 FNL & 1470 FWL; Sec 29, 26S, 27E
BHL 330 FSL & 2020 FWL; Sec. 32, 26S, 27E

2. Elevation Above Sea Level: 3,250' GR

3. Geologic Name of Surface Formation: Quaternary Alluvium Deposits

4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal

5. Proposed Drilling Depth: 14,150 MD 7,411 TVD Pilot Hole TD: 7,950

6. Estimated Tops of Geological Markers:

Formation	Est Top	Bearing
Salado	1438	N/A
Castille	1898	N/A
Bell Canyon	2060	N/A
Cherry Canyon	3049	N/A
Brushy Canyon	4194	N/A
Brushy Canyon Lower	5466	N/A
Bone Spring	5658	Hydrocarbons
Bone Spring A Shale	5787	Hydrocarbons
Bone Spring C Shale	6266	Hydrocarbons
1st Bone Spring Ss	6607	Hydrocarbons
2nd Bone Spring Ss	7057	Hydrocarbons
2nd BS Ss Horz Target	7431	Hydrocarbons
3rd BS Limestone	7578	Hydrocarbons
TD (Pilot Hole)	7950	Hydrocarbons

7. Possible Mineral Bearing Formation: Shown above

7A. OSE Ground Water Estimated Depth: 100'

8. Casing Program:

See COA

Name	Casing Depth From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Open Hole Size (inches)	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Conditon	BHP (psig)	Anticipated Mud Weight (ppg)	Collapse SF at Full Evacuation(1.125)	Collapse SF at 1/3 Evacuation(1.125)	Burst SF (1.125)	Cumulative Air Weight	Cumulative Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface	0	400	400	17 1/2	13-3/8"	48.00	H-40	ST&C	New	172	8.3	4.29		10.02	19,200	16,767	19.20
Intermediate	0	~~2030~~ 1950	~~2030~~	12 1/4	9-5/8"	36.00	J-55	LT&C	New	1055	10.0		1.91	3.33	73,080	61,923	7.32
Production	0	6953	6953	8 3/4	5-1/2"	17.00	L-80	LT&C	New	3254	9.0	1.93		2.38	125,987	108,676	3.11
Production	6953	14150	7411	8 3/4	5-1/2"	17.00	L-80	BT&C	New	3468	9.0	1.81		2.23	7,786	6,716	59.11

Note: Operator may drill a 8-1/2" OH from end of curve to TD of the well. This is to reduce the need to ream the conventionally drilled curve to run a RSS assembly into the lateral.

Application to Drill
Medwick 29 Federal Com #6H
Cimarex Energy Co.
UL: C, Sec. 29, 26E, 27E
Eddy Co., NM

8A. Casing Design and Casing Loading Assumptions:

Surface	Tension	A 1.8 design factor with effects of buoyancy: 8.30 ppg.
	Collapse	A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.30 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Intermediate	Tension	A 1.8 design factor with effects of buoyancy: 10.00 ppg.
	Collapse	A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.00 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Production and\or Production Completion System	Tension	A 1.8 design factor with effects of buoyancy: 9.00 ppg.
	Collapse	A 1.125 design factor with full internal evacuation of next casing string with a collapse force equal to a 9.00 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

9. Cementing Program:

Casing Type	Type	Sacks	Yield	Weight	Cubic Feet	Cement Blend
Surface	Lead	79	1.75	13.50	138	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
See COA	Tail	195	1.34	14.80	260	Class C + LCM, 6.32 gps water
	TOC: 0		**44% Excess**			**Centralizers per Onshore Order 2.III.B.1f**
Intermediate	Lead	475	1.88	12.90	892	35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	118	1.34	14.80	158	Class C + retarder + LCM, 6.32 gps water
	TOC: 0		**82% Excess**			
Production	Lead	604	2.40	11.90	1448	35:65 (poz/H) + salt + Sodium Metasilcate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1961	1.24	14.50	2431	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
See COA	~~TOC: 1850~~		**25% Excess**			**No centralizers planned in the lateral section. 1 every jt from EOC to KOP. 1 every 4th joint from KOP to 500' inside previous casing.**

Cement volumes will be adjusted depending on hole size

9a. Proposed Drilling Plan:

Pilot Hole TD: 7,950' KOP: 6,953' EOC: 7,705'

Set OH mechanical whipstock w/ 947 ft of 2.875 tubing and pump 30 bbls of Mudpush @ 12 ppg, followed by 443 sks Type H cement, dispersant 0.080 gals/sk, retarder 0.045 gals/sk @ 17.50 ppg, 0.94 cuft/sk, & 0% excess from pilot hole TD to KOP. KO lateral and drill through the curve to TD. Run production csg to TD and cement.

Application to Drill
Medwick 29 Federal Com #6H
Cimarex Energy Co.
UL: C, Sec. 29, 26E, 27E
Eddy Co., NM

10. Pressure Control Equipment:
Exhibit "E-1". A BOP consisting of two rams with blind rams and pipe rams, and one annular preventer. Below the surface casing, a 2M system will be used. Below the intermediate casing, a 3M system will be used. See attachments for BOP and choke manifold diagrams. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A Rotating head may be installed as needed. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP and associated equipment will be installed, used, maintained, and tested in a manner necessary to assure well control and shall be in place and operational prior to drilling the surface casing shoe. The Annular Preventer shall be functioned at least weekly. The pipe and blind rams will be operated each trip. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: On the surface casing, pressure tests will be made to 250 psi low and 2000 psi high. On the intermediate casing, pressure tests will be made to 250 psi low and 3000 psi high.

The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 low and 1500 high on the intermediate casing.

See COA

Cimarex Energy Co. of Colorado requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used.

See COA

11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 400'	8.30	28	NC	FW Spud Mud
400' to 2030' 1950'	10.00	30-32	NC	Brine Water
2030' to 14150'	9.00	30-32	NC	FW/Cut Brine

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

The Mud Monitoring System is an electronic Pason System satisfying requirements of Onshore Order 1.

12. Testing, Logging and Coring Program:

A. Mud logging program: 2 man unit from 2030 to TD
B. Electric logging program: CNL / LDT / CAL / GR, DLL /GR -- Inter. Csg. to TD
CNL /GR -- Surf to Inter. Csg
C. No DSTs or cores are planned at this time
D.CBL w/ CCL from as far as gravity will let it fall to TOC

13. Potential Hazards:
No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H_2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H_2S Safety package on all wells, attached is an "H_2S Drilling Operations Plan." Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

Estimated BHP: 3578 psi Estimated BHT: 140°

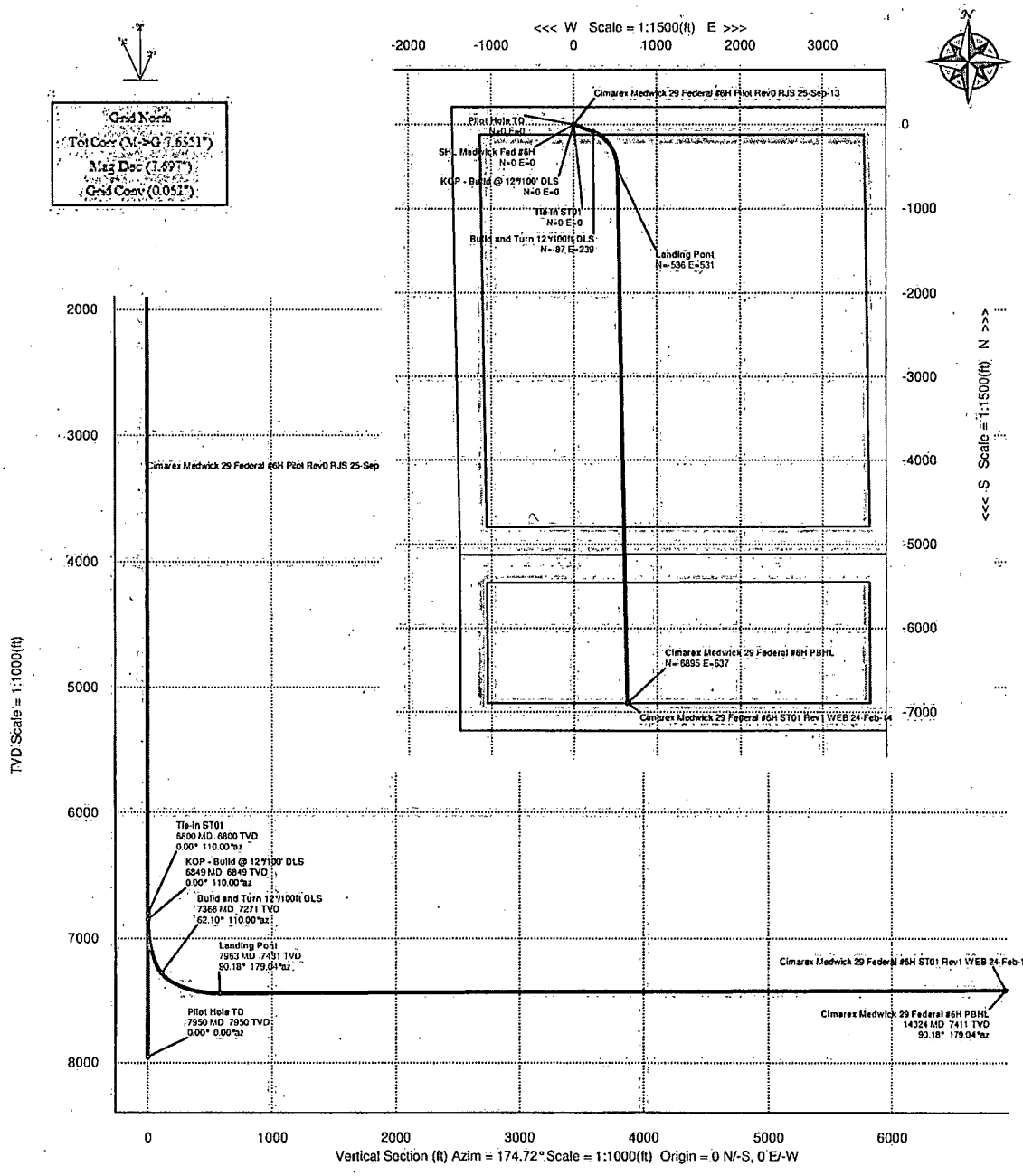
14. Construction and Drilling:
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.
Drilling expected to take: 35 days.
If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:
If production casing is run an additional 30 days will be required to complete and construct surface facilities.
Bone Spring pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **Oil**

Cimarex

PATHFINDER
A Schlumberger Company

WELL	FIELD	STRUCTURE
Medwick 29 Federal #6H	NM Eddy County (NAD 83)	TBD



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-In ST01	6800.00	0.00	110.00	6800.00	0.00	0.00	0.00	
KOP - Build @ 12°/100' DLS	6848.80	0.00	110.00	6848.80	0.00	0.00	0.00	0.00
Build and Turn 12°/100ft DLS	7366.30	62.10	110.00	7270.77	108.49	-86.89	238.72	12.00
Landing Pont	7963.48	90.18	179.04	7431.00	582.36	-535.79	530.80	12.00
Cimarex Medwick 29 Federal #6H PBHL	14323.73	90.18	179.04	7411.00	6924.49	-6895.12	637.12	0.00

Cimarex Medwick 29 Federal #6H ST01 Rev1 WEB 24-Feb-14 Proposal
Geodetic Report 100' Interpolated
(Non-Def Plan)

PATHFINDER
A Schlumberger Company

Report Date:	February 24, 2014 - 05:00 PM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex	**Vertical Section Azimuth:**	174.720 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Medwick 29 Federal #6H / Cimarex Medwick 29 Federal #6H	**TVD Reference Datum:**	Ground Level
Well:	Cimarex Medwick 29 Federal #6H	**TVD Reference Elevation:**	3250.000 ft above
Borehole:	ST01 Borehole	**Seabed / Ground Elevation:**	3250.000 ft above
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.697 °
Survey Name:	Cimarex Medwick 29 Federal #6H ST01 Rev1 WEB 24-Feb-14	**Total Gravity Field Strength:**	998.4851mgn (9.80665 Based)
Survey Date:	September 25, 2013	**Total Magnetic Field Strength:**	48173.387 nT
Tort / AHD / DDI / ERD Ratio:	133.764 ° / 7182.935 ft / 6.268 / 0.967	**Magnetic Dip Angle:**	59.811 °
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Declination Date:**	September 25, 2013
Location Lat / Long:	N 32° 1' 11.61594", W 104° 12' 57.15998"	**Magnetic Declination Model:**	BGGM 2013
Location Grid N/E Y/X:	N 370995.880 ftUS, E 577739.470 ftUS	**North Reference:**	Grid North
CRS Grid Convergence Angle:	0.0623 °	**Grid Convergence Used:**	0.0623 °
Grid Scale Factor:	0.99991061	**Total Corr Mag North->Grid North:**	7.6351 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie In ST01	6800.00	0.00	110.00	6800.00	0.00	0.00	0.00	N/A	370995.88	577739.47	N 32 1 11.62	W 104 12 57.16
KOP - Build @ 12°/100' DLS	6848.80	0.00	110.00	6848.80	0.00	0.00	0.00	0.00	370995.88	577739.47	N 32 1 11.62	W 104 12 57.16
	6900.00	6.14	110.00	6899.90	1.17	-0.94	2.58	12.00	370994.94	577742.05	N 32 1 11.61	W 104 12 57.13
	7000.00	18.14	110.00	6997.49	10.14	-8.12	22.31	12.00	370987.76	577761.78	N 32 1 11.54	W 104 12 56.90
	7100.00	30.14	110.00	7088.57	27.57	-22.08	60.68	12.00	370973.80	577800.14	N 32 1 11.40	W 104 12 56.46
	7200.00	42.14	110.00	7169.18	52.72	-42.22	116.00	12.00	370953.66	577855.46	N 32 1 11.20	W 104 12 55.81
	7300.00	54.14	110.00	7235.78	84.46	-67.65	185.86	12.00	370928.24	577925.31	N 32 1 10.94	W 104 12 55.00
Build and Turn 12°/100ft DLS	7366.30	62.10	110.00	7270.77	108.49	-86.89	238.72	12.00	370909.00	577978.17	N 32 1 10.75	W 104 12 54.39
	7400.00	62.90	114.47	7286.33	122.30	-98.20	266.38	12.00	370897.69	578005.83	N 32 1 10.64	W 104 12 54.07
	7500.00	66.05	127.31	7329.57	175.50	-144.50	343.52	12.00	370851.39	578082.96	N 32 1 10.18	W 104 12 53.17
	7600.00	70.21	139.44	7366.93	245.09	-208.17	410.70	12.00	370787.72	578150.14	N 32 1 9.55	W 104 12 52.39
	7700.00	75.15	150.91	7396.78	328.01	-286.44	464.99	12.00	370709.47	578204.42	N 32 1 8.78	W 104 12 51.76
	7800.00	80.63	161.83	7417.81	420.65	-375.87	504.02	12.00	370620.05	578243.44	N 32 1 7.89	W 104 12 51.31
	7900.00	86.42	172.41	7429.12	518.97	-472.56	526.08	12.00	370523.36	578265.50	N 32 1 6.93	W 104 12 51.06
Landing Pont	7963.48	90.18	179.04	7431.00	582.36	-535.79	530.80	12.00	370460.14	578270.22	N 32 1 6.31	W 104 12 51.00
	8000.00	90.18	179.04	7430.89	618.78	-572.30	531.41	0.00	370423.63	578270.83	N 32 1 5.95	W 104 12 51.00
	8100.00	90.18	179.04	7430.57	718.49	-672.29	533.09	0.00	370323.65	578272.51	N 32 1 4.96	W 104 12 50.98
	8200.00	90.18	179.04	7430.26	818.21	-772.27	534.76	0.00	370223.68	578274.18	N 32 1 3.97	W 104 12 50.96
	8300.00	90.18	179.04	7429.94	917.92	-872.26	536.44	0.00	370123.70	578275.86	N 32 1 2.98	W 104 12 50.94
	8400.00	90.18	179.04	7429.63	1017.64	-972.25	538.11	0.00	370023.72	578277.53	N 32 1 1.99	W 104 12 50.92
	8500.00	90.18	179.04	7429.31	1117.35	-1072.23	539.79	0.00	369923.75	578279.21	N 32 1 1.00	W 104 12 50.90

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 ° ' ")
	8600.00	90.18	179.04	7429.00	1217.07	-1172.22	541.46	0.00	369823.77	578280.88	N 32 1 0.01	W 104 12 50.89
	8700.00	90.18	179.04	7428.69	1316.78	-1272.20	543.14	0.00	369723.79	578282.56	N 32 0 59.02	W 104 12 50.87
	8800.00	90.18	179.04	7428.37	1416.50	-1372.19	544.81	0.00	369623.82	578284.23	N 32 0 58.03	W 104 12 50.85
	8900.00	90.18	179.04	7428.06	1516.22	-1472.17	546.48	0.00	369523.84	578285.90	N 32 0 57.04	W 104 12 50.83
	9000.00	90.18	179.04	7427.74	1615.93	-1572.16	548.16	0.00	369423.87	578287.58	N 32 0 56.05	W 104 12 50.81
	9100.00	90.18	179.04	7427.43	1715.65	-1672.14	549.83	0.00	369323.89	578289.25	N 32 0 55.06	W 104 12 50.80
	9200.00	90.18	179.04	7427.11	1815.36	-1772.13	551.51	0.00	369223.91	578290.93	N 32 0 54.07	W 104 12 50.78
	9300.00	90.18	179.04	7426.80	1915.08	-1872.12	553.18	0.00	369123.94	578292.60	N 32 0 53.08	W 104 12 50.76
	9400.00	90.18	179.04	7426.49	2014.79	-1972.10	554.85	0.00	369023.96	578294.27	N 32 0 52.10	W 104 12 50.74
	9500.00	90.18	179.04	7426.17	2114.51	-2072.09	556.53	0.00	368923.98	578295.95	N 32 0 51.11	W 104 12 50.72
	9600.00	90.18	179.04	7425.86	2214.22	-2172.07	558.20	0.00	368824.01	578297.62	N 32 0 50.12	W 104 12 50.70
	9700.00	90.18	179.04	7425.54	2313.94	-2272.06	559.88	0.00	368724.03	578299.29	N 32 0 49.13	W 104 12 50.69
	9800.00	90.18	179.04	7425.23	2413.65	-2372.04	561.55	0.00	368624.05	578300.97	N 32 0 48.14	W 104 12 50.67
	9900.00	90.18	179.04	7424.91	2513.37	-2472.03	563.22	0.00	368524.08	578302.64	N 32 0 47.15	W 104 12 50.65
	10000.00	90.18	179.04	7424.60	2613.08	-2572.01	564.89	0.00	368424.10	578304.31	N 32 0 46.16	W 104 12 50.63
	10100.00	90.18	179.04	7424.29	2712.80	-2672.00	566.57	0.00	368324.13	578305.99	N 32 0 45.17	W 104 12 50.61
	10200.00	90.18	179.04	7423.97	2812.51	-2771.98	568.24	0.00	368224.15	578307.66	N 32 0 44.18	W 104 12 50.60
	10300.00	90.18	179.04	7423.66	2912.23	-2871.97	569.91	0.00	368124.17	578309.33	N 32 0 43.19	W 104 12 50.58
	10400.00	90.18	179.04	7423.34	3011.94	-2971.96	571.59	0.00	368024.20	578311.00	N 32 0 42.20	W 104 12 50.56
	10500.00	90.18	179.04	7423.03	3111.66	-3071.94	573.26	0.00	367924.22	578312.68	N 32 0 41.21	W 104 12 50.54
	10600.00	90.18	179.04	7422.71	3211.37	-3171.93	574.93	0.00	367824.24	578314.35	N 32 0 40.22	W 104 12 50.52
	10700.00	90.18	179.04	7422.40	3311.09	-3271.91	576.60	0.00	367724.27	578316.02	N 32 0 39.23	W 104 12 50.50
	10800.00	90.18	179.04	7422.09	3410.80	-3371.90	578.27	0.00	367624.29	578317.69	N 32 0 38.24	W 104 12 50.49
	10900.00	90.18	179.04	7421.77	3510.52	-3471.88	579.95	0.00	367524.31	578319.36	N 32 0 37.25	W 104 12 50.47
	11000.00	90.18	179.04	7421.46	3610.24	-3571.87	581.62	0.00	367424.34	578321.04	N 32 0 36.26	W 104 12 50.45
	11100.00	90.18	179.04	7421.14	3709.95	-3671.85	583.29	0.00	367324.36	578322.71	N 32 0 35.27	W 104 12 50.43
	11200.00	90.18	179.04	7420.83	3809.67	-3771.84	584.96	0.00	367224.38	578324.38	N 32 0 34.29	W 104 12 50.41
	11300.00	90.18	179.04	7420.51	3909.38	-3871.83	586.63	0.00	367124.41	578326.05	N 32 0 33.30	W 104 12 50.40
	11400.00	90.18	179.04	7420.20	4009.10	-3971.81	588.30	0.00	367024.43	578327.72	N 32 0 32.31	W 104 12 50.38
	11500.00	90.18	179.04	7419.88	4108.81	-4071.80	589.98	0.00	366924.46	578329.39	N 32 0 31.32	W 104 12 50.36
	11600.00	90.18	179.04	7419.57	4208.53	-4171.78	591.65	0.00	366824.48	578331.06	N 32 0 30.33	W 104 12 50.34
	11700.00	90.18	179.04	7419.25	4308.24	-4271.77	593.32	0.00	366724.50	578332.73	N 32 0 29.34	W 104 12 50.32
	11800.00	90.18	179.04	7418.94	4407.96	-4371.75	594.99	0.00	366624.53	578334.40	N 32 0 28.35	W 104 12 50.31
	11900.00	90.18	179.04	7418.63	4507.67	-4471.74	596.66	0.00	366524.55	578336.08	N 32 0 27.36	W 104 12 50.29
	12000.00	90.18	179.04	7418.31	4607.39	-4571.72	598.33	0.00	366424.57	578337.75	N 32 0 26.37	W 104 12 50.27
	12100.00	90.18	179.04	7418.00	4707.10	-4671.71	600.00	0.00	366324.60	578339.42	N 32 0 25.38	W 104 12 50.25
	12200.00	90.18	179.04	7417.68	4806.82	-4771.70	601.67	0.00	366224.62	578341.09	N 32 0 24.39	W 104 12 50.23
	12300.00	90.18	179.04	7417.37	4906.53	-4871.68	603.34	0.00	366124.64	578342.76	N 32 0 23.40	W 104 12 50.21
	12400.00	90.18	179.04	7417.05	5006.25	-4971.67	605.01	0.00	366024.67	578344.43	N 32 0 22.41	W 104 12 50.20
	12500.00	90.18	179.04	7416.74	5105.96	-5071.65	606.68	0.00	365924.69	578346.10	N 32 0 21.42	W 104 12 50.18
	12600.00	90.18	179.04	7416.42	5205.68	-5171.64	608.35	0.00	365824.72	578347.77	N 32 0 20.43	W 104 12 50.16
	12700.00	90.18	179.04	7416.11	5305.39	-5271.62	610.02	0.00	365724.74	578349.44	N 32 0 19.44	W 104 12 50.14
	12800.00	90.18	179.04	7415.79	5405.11	-5371.61	611.69	0.00	365624.76	578351.11	N 32 0 18.45	W 104 12 50.12
	12900.00	90.18	179.04	7415.48	5504.82	-5471.59	613.36	0.00	365524.79	578352.77	N 32 0 17.47	W 104 12 50.11
	13000.00	90.18	179.04	7415.17	5604.54	-5571.58	615.03	0.00	365424.81	578354.44	N 32 0 16.48	W 104 12 50.09
	13100.00	90.18	179.04	7414.85	5704.25	-5671.57	616.70	0.00	365324.83	578356.11	N 32 0 15.49	W 104 12 50.07
	13200.00	90.18	179.04	7414.54	5803.97	-5771.55	618.37	0.00	365224.86	578357.78	N 32 0 14.50	W 104 12 50.05
	13300.00	90.18	179.04	7414.22	5903.68	-5871.54	620.04	0.00	365124.88	578359.45	N 32 0 13.51	W 104 12 50.03
	13400.00	90.18	179.04	7413.91	6003.40	-5971.52	621.71	0.00	365024.90	578361.12	N 32 0 12.52	W 104 12 50.02

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 ° ' ")
	13500.00	90.18	179.04	7413.59	6103.11	-6071.51	623.38	0.00	364924.93	578362.79	N 32 0 11.53	W 104 12 50.00
	13600.00	90.18	179.04	7413.28	6202.83	-6171.49	625.04	0.00	364824.95	578364.46	N 32 0 10.54	W 104 12 49.98
	13700.00	90.18	179.04	7412.96	6302.54	-6271.48	626.71	0.00	364724.97	578366.13	N 32 0 9.55	W 104 12 49.96
	13800.00	90.18	179.04	7412.65	6402.26	-6371.46	628.38	0.00	364625.00	578367.79	N 32 0 8.56	W 104 12 49.94
	13900.00	90.18	179.04	7412.33	6501.97	-6471.45	630.05	0.00	364525.02	578369.46	N 32 0 7.57	W 104 12 49.93
	14000.00	90.18	179.04	7412.02	6601.68	-6571.44	631.72	0.00	364425.05	578371.13	N 32 0 6.58	W 104 12 49.91
	14100.00	90.18	179.04	7411.70	6701.40	-6671.42	633.39	0.00	364325.07	578372.80	N 32 0 5.59	W 104 12 49.89
	14200.00	90.18	179.04	7411.39	6801.11	-6771.41	635.05	0.00	364225.09	578374.47	N 32 0 4.60	W 104 12 49.87
	14300.00	90.18	179.04	7411.07	6900.83	-6871.39	636.72	0.00	364125.12	578376.13	N 32 0 3.61	W 104 12 49.85
Cimarex Medwick 29 Federal #6H PBHL	14323.73	90.18	179.04	7411.00	6924.49	-6895.12	637.12	0.00	364101.39	578376.53	N 32 0 3.38	W 104 12 49.85

Survey Type: Non-Def Plan

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

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	6800.000	1/100.000	30.000	30.000	SLB_MWD-STD	Pilot Borehole / Cimarex Medwick 29 Federal #6H Pilot Rev0 RJS
	6800.000	14150.366	1/100.000	30.000	30.000	SLB_MWD-STD	ST01 Borehole / Cimarex Medwick 29 Federal #6H ST01

Drilling 12-1/4" hole below 13 3/8" Casing

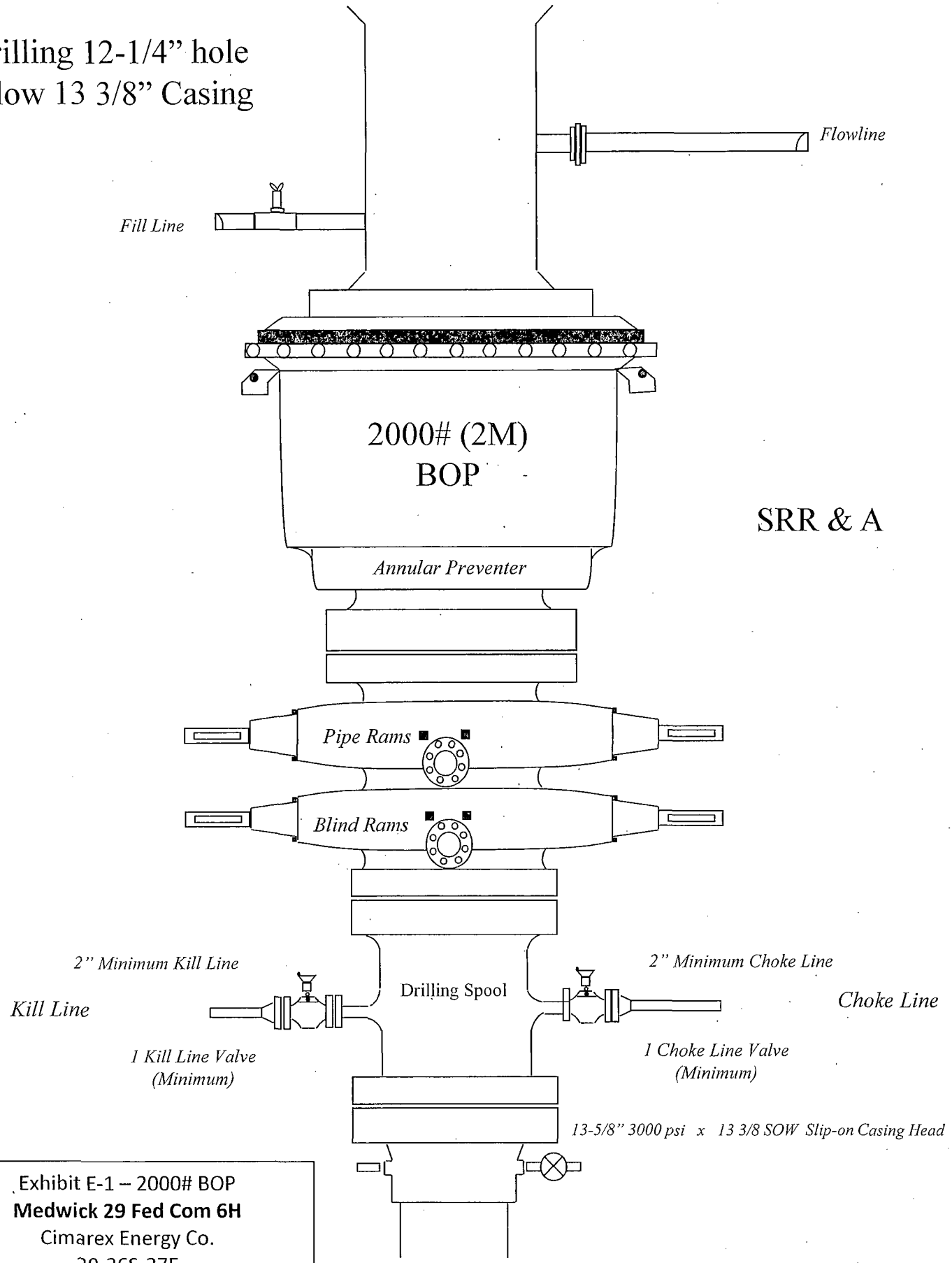
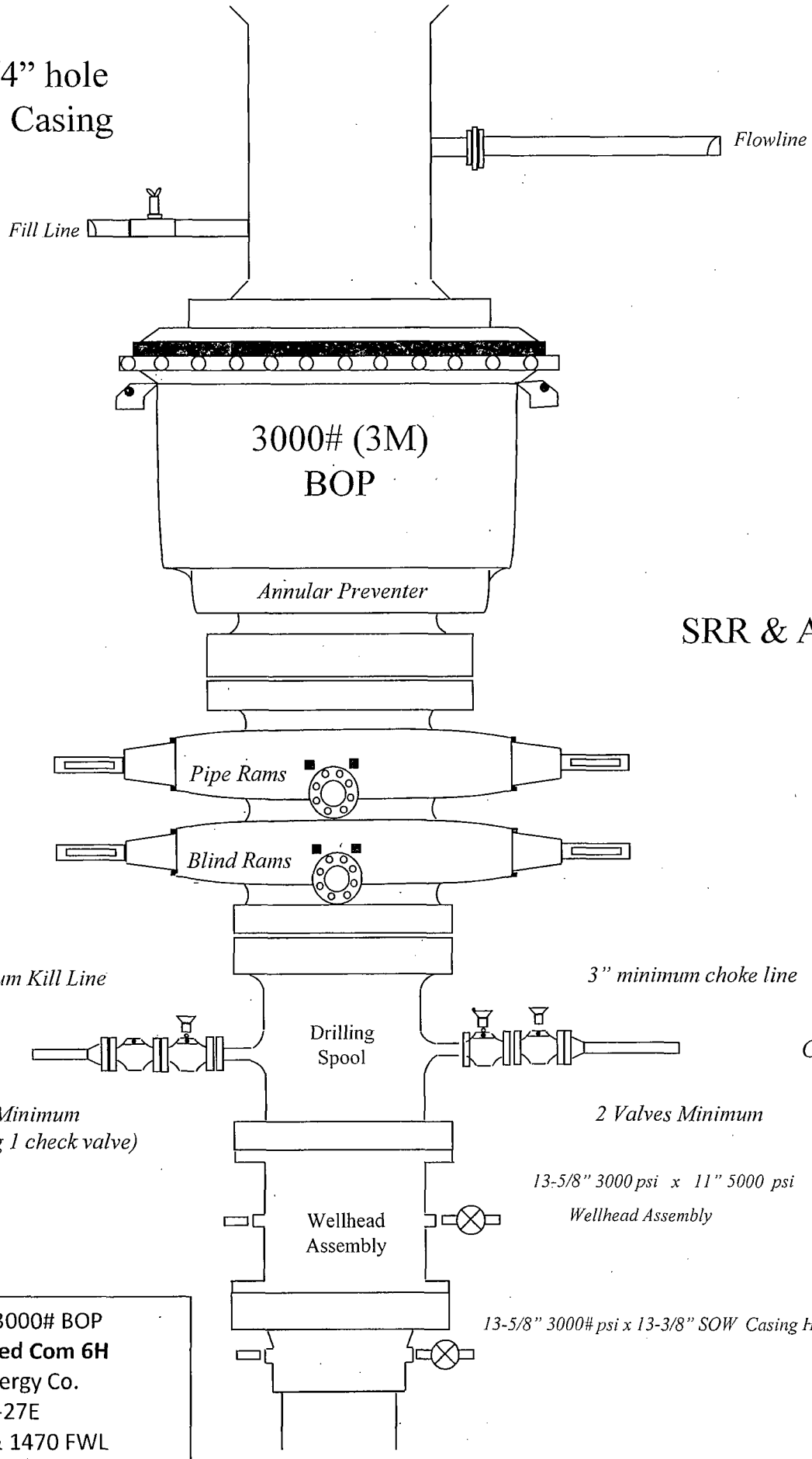


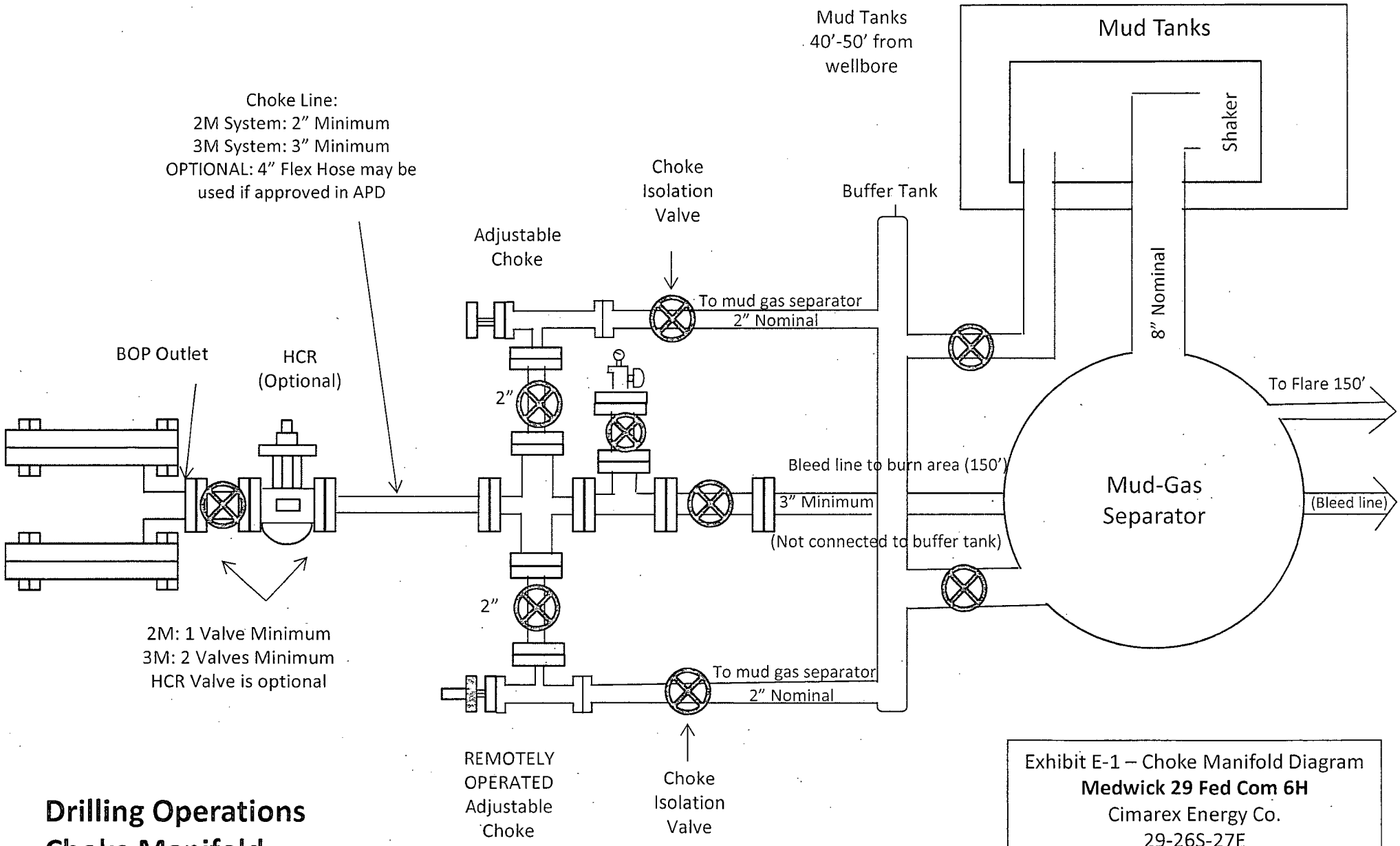
Exhibit E-1 – 2000# BOP
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Drilling 8-3/4" hole
below 9 5/8" Casing



SRR & A

Exhibit E-1 – 3000# BOP
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM



Drilling Operations
Choke Manifold
2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
Oderco Inc	odyd-271

HOSE SPECIFICATIONS

Type:	Hose Length:
Stainless Steel Armor Choke & Kill Hose	45'ft.

I.D.	O.D.
4 INCHES	9 INCHES

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 PSI	15,000 PSI	0 PSI

COUPLINGS

Stem Part No.	Ferrule No.
OKC OKC	OKC OKC
Type of Coupling:	
Swage-It	

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
15 MIN.	0 PSI

Hose Assembly Serial Number:	Hose Serial Number:
79793	OKC

Comments:

Date:	Tested:	Approved:
3/8/2011	A. Jaime Jaime	

Midwest Hose & Specialty, Inc.

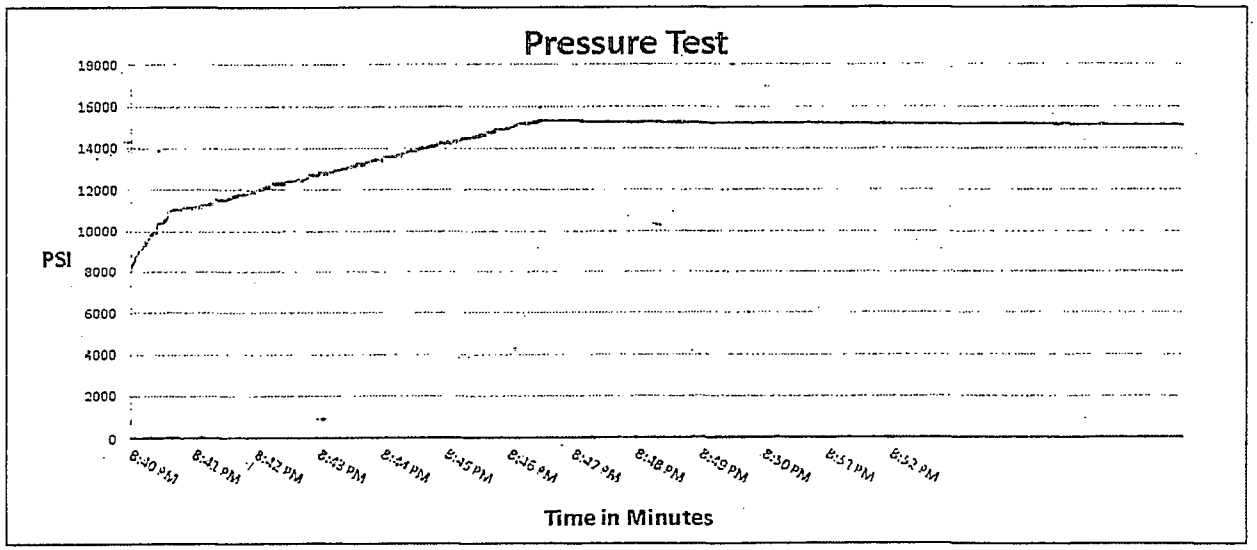
Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type	Length	Type of Fitting	Coupling Method
C & K	45'	4 1/16 10K	Swage
I.D.	O.D.	Die Size	Final O.D.
4"	6.09"	6.38"	6.25"
Working Pressure	Burst Pressure	Hose Serial #	Hose Assembly Serial #
10000 PSI	Standard Safety Multiplier Applies	5544	79793



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 Minutes		15483 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Zac Mcconnell*

Approved By: *Kim Thomas*

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Exhibit F-2 – Co-Flex Hose
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer:	PO
DEM	ODYD-271

SPECIFICATIONS

Sales Order	Dated:
79793	3/8/2011

We hereby cerify that the material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards

Supplier:
Midwest Hose & Specialty, Inc.
10640 Tanner Road
Houston, Texas 77041

Comments:

Approved:	Date:
[signature]	3/8/2011

Midwest Hose & Specialty, Inc.

Exhibit F -3– Co-Flex Hose
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

Specification Sheet
Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium componets.The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unibolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2", 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

P.O. Box 96558 – 1421 S.E. 29th St. Oklahoma City, OK 73143 * (405) 670-6718 * Fax: (405) 670-6816

Exhibit F – Co-Flex Hose

Medwick 29 Fed Com 6H

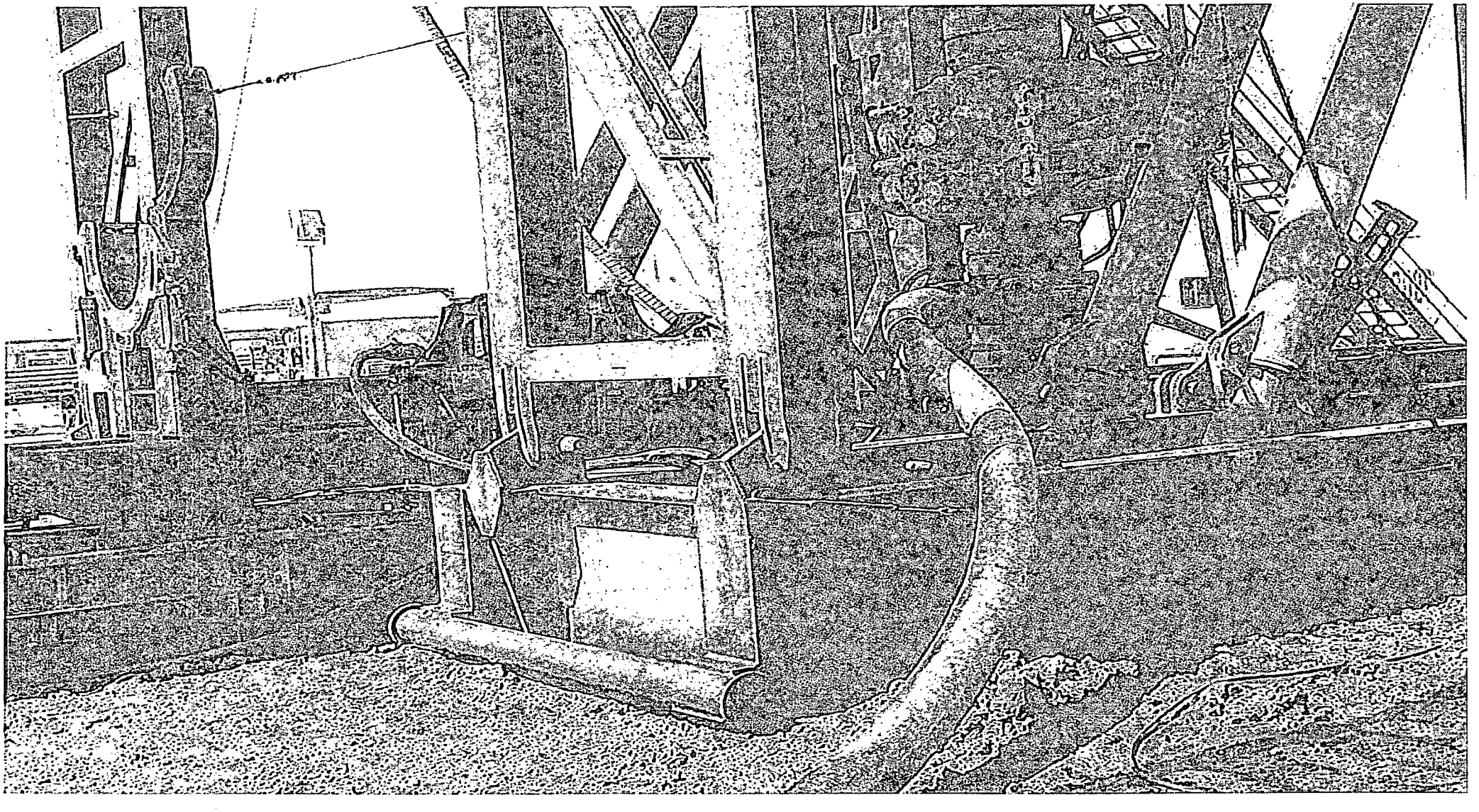
Cimarex Energy Co.

29-26S-27E

SHL 210 FNL & 1470 FWL

BHL 330 FSL & 2020 FWL

Eddy County, NM



Hydrogen Sulfide Drilling Operations Plan
Medwick 29 Federal Com 6H
Cimarex Energy Co.
UL: C, Sec. 29-26S-27E
Eddy Co., NM

1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
   A. Characteristics of H_2S
   B. Physical effects and hazards
   C. Principal and operation of H2S detectors, warning system and briefing areas.
   D. Evacuation procedure, routes and first aid.
   E. Proper use of safety equipment & life support systems
   F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

2 H_2S Detection and Alarm Systems:
   A. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may play placed as deemed necessary.
   B. An audio alarm system will be installed on the derrick floor and in the top doghouse.

3 Windsock and/or wind streamers:
   A. Windsock at mudpit area should be high enough to be visible.
   B. Windsock on the rig floor and / or top doghouse should be high enough to be visible.

4 Condition Flags and Signs
   A. Warning sign on access road to location.
   B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H_2S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.

5 Well control equipment:
   A. See exhibit "E-1"

6 Communication:
   A. While working under masks chalkboards will be used for communication.
   B. Hand signals will be used where chalk board is inappropriate.
   C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing:
No DSTs r cores are planned at this time.

8 Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.

9 If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H_2S scavengers if necessary.

H_2S Contingency Plan
Medwick 29 Federal Com 6H
Cimarex Energy Co.
UL: C, Sec. 29-26S-27E
Eddy Co., NM

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H_2S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the response.
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training in the:
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air=1	2 ppm	N/A	1000 ppm

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H_2S Contingency Plan Emergency Contacts

Medwick 29 Federal Com 6H

Cimarex Energy Co.

UL: C, Sec. 29-26S-27E

Eddy Co., NM

Company Office		
Cimarex Energy Co. of Colorado	800-969-4789	
Co. Office and After-Hours Menu		

Key Personnel

Name	Title	Office	Mobile
Larry Seigrist	Drilling Manager	432-620-1934	580-243-8485
Doug McQuitty	Drilling Superintendent	432-620-1933	806-640-2605
Scott Lucas	Drilling Superintendent	432-620-1989	432-894-5572
Conner Cromeens	Construction Foreman		432-270-0313
Roy Shirley	Construction Superintendent		432-634-2136

Artesia		
Ambulance	911	
State Police	575-746-2703	
City Police	575-746-2703	
Sheriff's Office	575-746-9888	
Fire Department	**575-746-2701**	
Local Emergency Planning Committee	575-746-2122	
New Mexico Oil Conservation Division	575-748-1283	

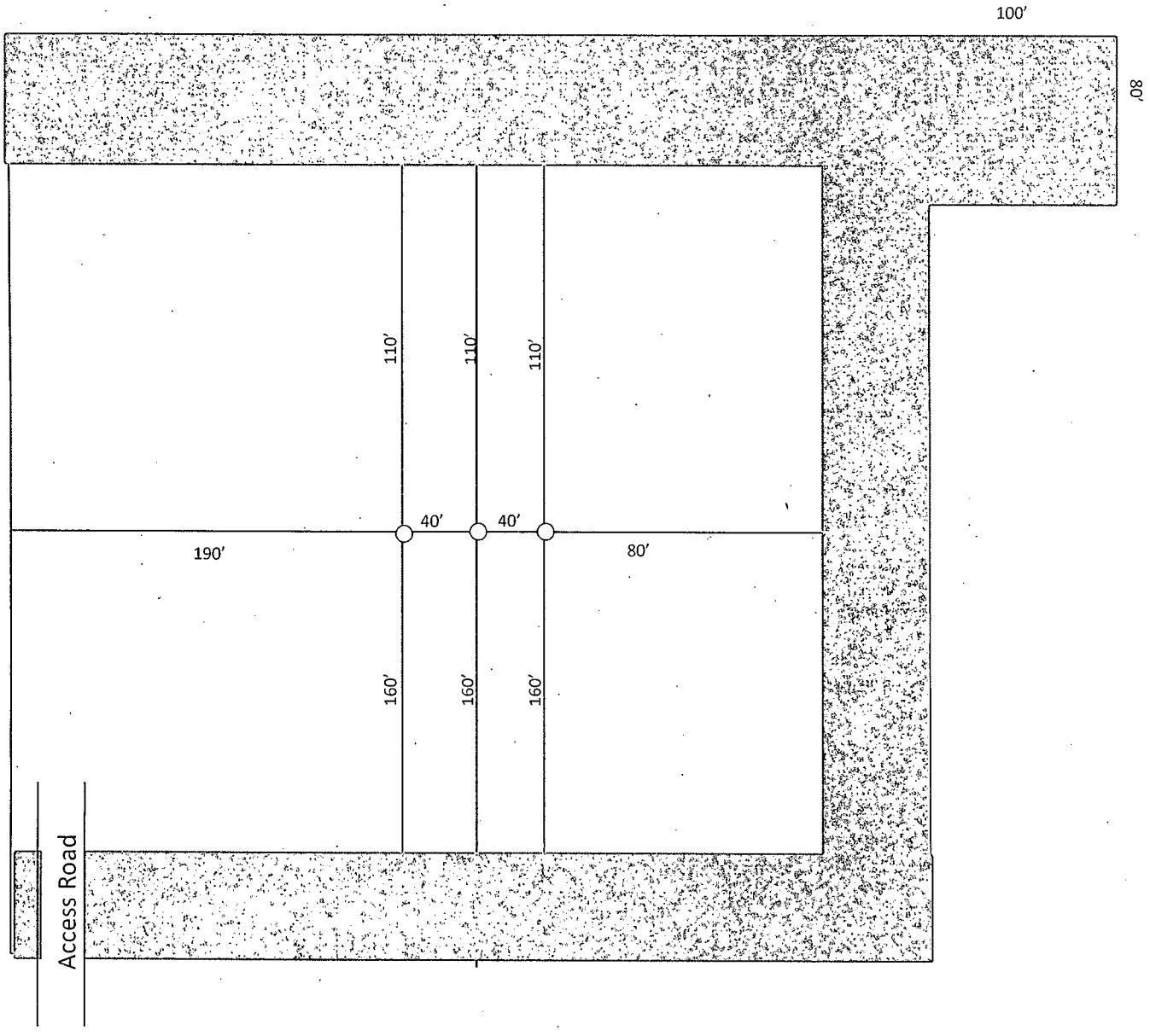
Carlsbad		
Ambulance	911	
State Police	575-885-3137	
City Police	575-885-2111	
Sheriff's Office	575-887-7551	
Fire Department	**575-887-3798**	
Local Emergency Planning Committee	575-887-6544	
US Bureau of Land Management	575-887-6544	

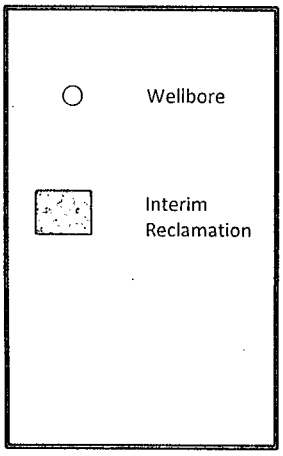
Santa Fe		
New Mexico Emergency Response Commission (Santa Fe)	505-476-9600	
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs	505-827-9126	
New Mexico State Emergency Operations Center	505-476-9635	

National		
National Emergency Response Center (Washington, D.C.)	800-424-8802	

Medical		
Flight for Life - 4000 24th St.; Lubbock, TX	806-743-9911	
Aerocare - R3, Box 49F; Lubbock, TX	806-747-8923	
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433	
SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949	

Other		
Boots & Coots IWC	800-256-9688	or 281-931-8884
Cudd Pressure Control	432-699-0139	or 432-563-3356
Halliburton	575-746-2757	
B.J. Services	575-746-3569	





N

Exhibit D-1
Interim Reclamation Diagram
Medwick 29 Fed Com 6H
Cimarex Energy Co.
29-26S-27E
SHL 210 FNL & 1470 FWL
BHL 330 FSL & 2020 FWL
Eddy County, NM

CIMAREX ENERGY CO.
MEDWICK 29 FEDERAL COM 4H
SECTION 29, T26S, R27E, N.M.P.M.

BEGINNING AT THE INTERSECTION OF GREENE STREET AND CANAL ST, PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY, THEN SOUTHWESTERLY DIRECTION FROM CARLSBAD, NEW MEXICO ALONG U.S. HIGHWAY 180/U.S. HIGHWAY 62 APPROXIMATELY 14.9 MILES TO THE JUNCTION OF THIS ROAD AND BLACK RIVER ROAD/COUNTY ROAD 720 TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 7.0 MILES TO THE JUNCTION OF THIS ROAD AND OLD CAVERN HIGHWAY/COUNTY ROAD 748 TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 14.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE FOX 31 FEDERAL 1, 2 & 3 TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 6,487' TO THE BEGINNING OF THE PROPOSED ACCESSES TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 5,084' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM CARLSBAD, NEW MEXICO TO THE PROPOSED LOCATION IS APPROXIMATELY 38.2 MILES.

Surface Use Plan
Medwick 29 Federal Com #6H
Cimarex Energy Co.
UL: C, Sec. 29, 26E, 27E
Eddy Co., NM

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what is submitted in this surface use plan without approval. If any other disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be submitted for approval prior to any new surface disturbance.

1.Existing Roads:

Area maps: Exhibit "B" - reproduction of Eddy Co. General Highway Map. Exhibit "C" - reproduction of a USGS Topographic Map. Exhibit "C-1" - well site layout map. Exhibits "C," C-1" - existing roads map.

The maximum width of the driving surface will be 14.' The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

Existing access road route to the proposed project is depicted on the public access point map if applicable. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwiswe noted in the New or Reconstructed Access Roads section of the surface use plan.

drive to well

If existing roads are used, the operator will improve or maintain existing roads in a condition the same as or better than before the operations began. The operator will repair pot holes, etc. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deterioated beyond practical use.

The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.

2. New or Reconstructed Access Roads:

A new road will be constructed for this project.
Cimarex Energy plans to construct 5086.17' of new on-lease access road to service the well.

The maximum width of the driving surface will be 14'. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
New access road route to the proposed project is depicted on the public access point map and Exhibit C-1. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done without prior approval from the BLM.
The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.

3. Planned Electric Line:

No new electric lines are planned.

4. Location of Existing Well in a One-Mile Radius -Exhibit A:

- Water Wells - None known
- Disposal Wells - None known
- Drilling Wells - None known
- Producing Wells - As shown on Exhibit A
- Abandoned Wells - As shownd on Exhibit A

Surface Use Plan
Medwick 29 Federal Com #6H
Cimarex Energy Co.
UL: C, Sec. 29, 26E, 27E
Eddy Co., NM

5. Location of Existing or Proposed Production Facilities:

If on completion this well is a producer, a tank battery will be used and the necessary production equipment will be installed and production will be sent to the Medwick 29 Federal Com 1H. Cimarex Energy proposes to install two 4 inch buried HP polylines down existing lease road to the Medwick 29 Federal Com 1H battery.

Cimarex Energy plans to construct on lease flowlines to service the well.

Specifications of Polyline: 1 HP polyline for oil, gas, and water production. 1 HP polyline for gas lift.

Both lines will be buried 25'-35' South of the access road.

Length: 765'

MAOP: 1500 psi. Anticipated working pressure: 200-300 psi.

Allocation will be based on well test. Route is on lease, please see Exhibit G & H. Any changes to on lease route will be submited via sundry notice.

6. Location and Type of Water Supply:
Water will be purchased locally from a commercial source and trucked over the access roads.

7. Source of Construction Material:
If possible, native caliche will be obtained from the excavation of drill site. The primary way of obtaining caliche will be by "turning over" the location. This means caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu yds is the max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
- An approximate 120' x 120' area is used within the proposed well site to remove caliche.
- Subsoil is removed and piled alongside the 120' by 120' area within the pad site.
- When caliche is found, material will be stockpiled within the pad site to build the location and road.
- Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- Once well is drilled, the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in Exhibit D – Rig Layout Diagram.

In the event that no caliche is found onsite, caliche will be hauled in from a BLM-approved caliche pit.

8. Ancillary Facilities:
No camps or airstrips to be constructed.

9. Well Site Layout:

- Exhibit "D" shows location and rig layout.
- Mud pits in the closed circulation system will be steel pits and the cuttings will be stored in steel containment pits.
- Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Cimarex Energy Co. of Colorado**
LEASE NO.:	**NMNM-117116**
WELL NAME & NO.:	**Medwick 29 Federal Com 6H**
SURFACE HOLE FOOTAGE:	**0210' FNL & 1470' FWL**
BOTTOM HOLE FOOTAGE	**0330' FSL & 2020' FWL Sec. 32, T. 26 S., R 27 E**
LOCATION:	**Section 29, T. 26 S., R 27 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

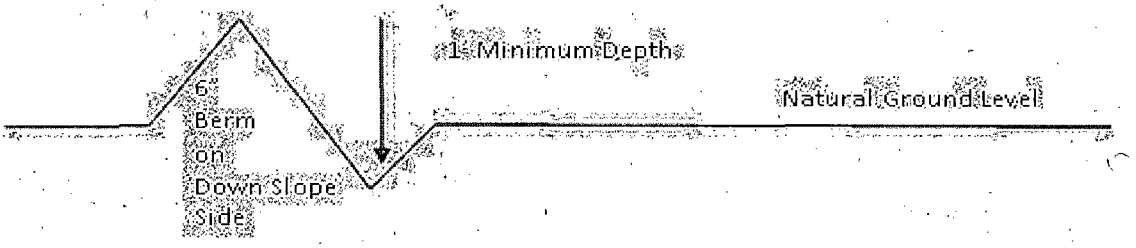
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Cattleguards

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

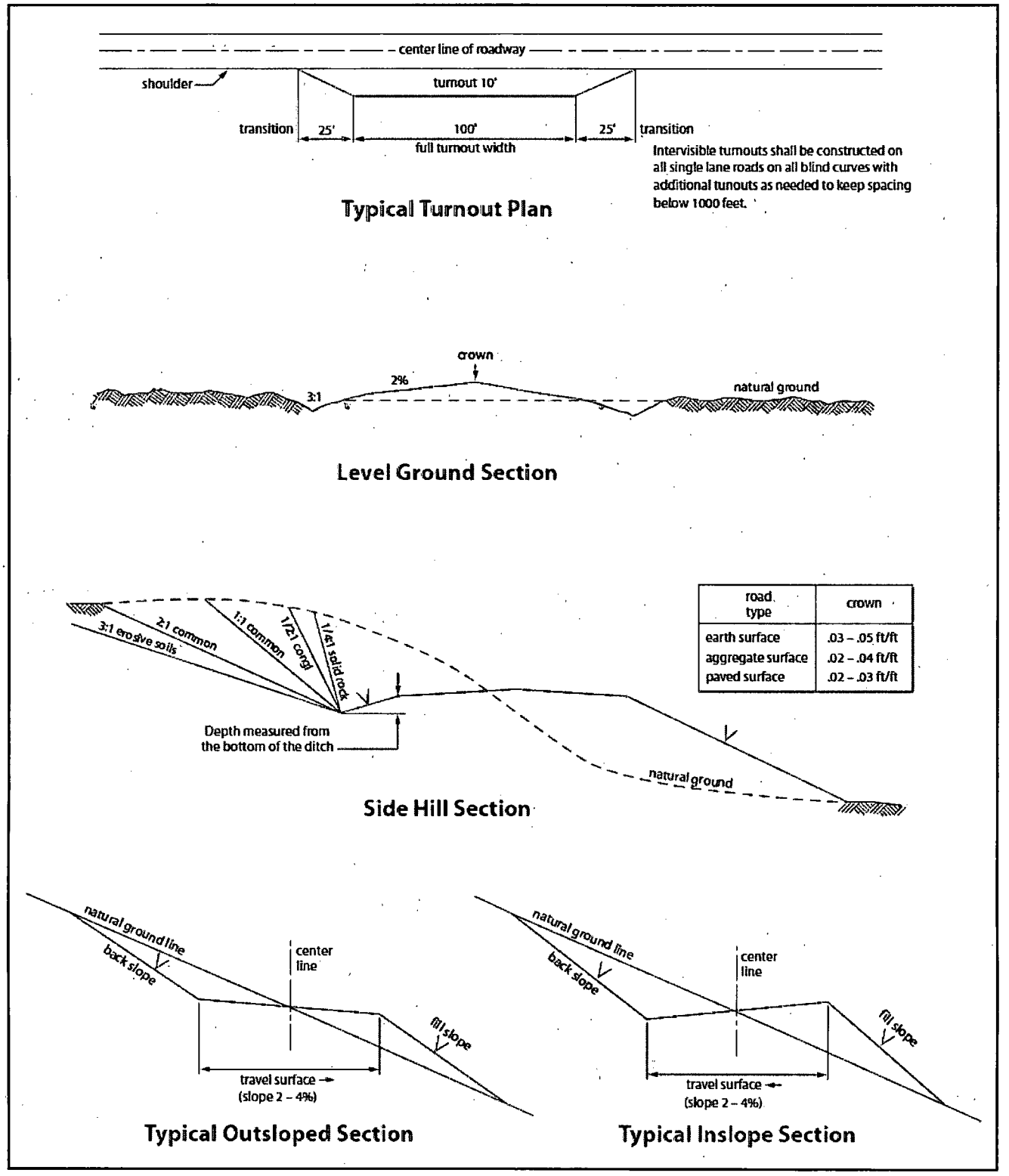


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, report measured amounts and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium Cave/Karst
Possibility of water flows in the Castile and Delaware.
Possibility of lost circulation in the Salado and Delaware.

1. The **13-3/8** inch surface casing shall be set at approximately **400** feet and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt. Excess calculates to 20% - Additional cement may be required.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **1950** feet, is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

Centralizers approved as written.

The pilot hole plugging procedure is approved as written. Note plug top on Subsequent Report sundry of drilling activities.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be **3000 (3M)** psi.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

    c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

    d. The results of the test shall be reported to the appropriate BLM office.

    e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 021214

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the

largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 4, for Gypsum Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS Four-wing saltbush (Atriplex canescens)	5.0

DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed