

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM92167
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CIMAREX ENERGY CO		7. If Unit or CA Agreement, Name and No.
3a. Address 202 S. Cheyenne Ave., Ste 1000 Tulsa OK 74		8. Lease Name and Well No. 317791 DAVINCI 7-18 FEDERAL COM 6H
3b. Phone No. (include area code) (432)620-1936		9. API Well No. 30-015-44220
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface LOT 7 / 350 FSL / 1190 FWL / LAT 32.152739 / LONG -104.234144 At proposed prod. zone LOT 4 / 330 FSL / 250 FWL / LAT 32.123531 / LONG -104.237167		10. Field and Well or Exploratory 98220 Purple SAGE WOLFCAMP / WILDCAT WOLFCAMP GAS
11. Sec., T. R. M. or Blk. and Survey or Area SEC 6 / T25S / R27E / NMP		12. County or Parish EDDY
13. State NM		14. Distance in miles and direction from nearest town or post office*
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 350 feet	16. No. of acres in lease 878.57	17. Spacing Unit dedicated to this well 354.28
18. Distance from proposed location* to nearest well, drilling, completed, 85 feet applied for, on this lease, ft.	19. Proposed Depth 9750 feet / 20609 feet	20. BLM/BIA Bond No. on file FED: NMB001188
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3281 feet	22. Approximate date work will start* 05/01/2017	23. Estimated duration 30 days

24. Attachments

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

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

25. Signature (Electronic Submission)	Name (Printed/Typed) Aricka Easterling / Ph: (918)560-7060	Date 12/09/2016
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 05/25/2017
Title Supervisor Multiple Resources		

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.

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

(Continued on page 2)

APPROVED WITH CONDITIONS

*(Instructions on page 2)
BUREAU OF LAND MANAGEMENT
OIL CONSERVATION
ARTESIA DISTRICT
MAY 30 2017
RECEIVED

RWP 5-31-17

APD ID: 10400007158

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Type: OIL WELL

Submission Date: 12/09/2016

Federal/Indian APD: FED

Well Number: 6H

Well Work Type: Drill

Highlight

All Changes

Application

Section 1 - General

APD ID: 10400007158

BLM Office: CARLSBAD

Federal/Indian APD: FED

Lease number: NMNM92167

Surface access agreement in place?

Agreement in place? NO

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

Operator letter of designation:

Keep application confidential? YES

Tie to previous NOS? 10400006261

User: Aricka Easterling

Is the first lease penetrated for production Federal or Indian? FED

Lease Acres: 878.57

Allotted?

Reservation:

Federal or Indian agreement:

Submission Date: 12/09/2016

Title: Regulatory Analyst

APD Operator: CIMAREX ENERGY CO

Operator Info

Operator Organization Name: CIMAREX ENERGY CO

Operator Address: 202 S. Cheyenne Ave., Ste 1000

Operator PO Box:

Operator City: Tulsa

State: OK

Operator Phone: (432)620-1936

Operator Internet Address: tstathem@cimarex.com

Zip: 74103

Section 2 - Well Information

Well in Master Development Plan? NO

Well in Master SUPO? NO

Well in Master Drilling Plan? NO

Master Development Plan name:

Master SUPO name:

Master Drilling Plan name:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WOLFCAMP

Pool Name: WILDCAT
WOLFCAMP

Is the proposed well in an area containing other mineral resources? USEABLE WATER,NATURAL GAS,OIL

Describe other minerals:

Is the proposed well in a Helium production area? N

Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:
DAVINCI 7-18 FEDERAL COM

Number: 6H, 7H,8H, 9H, 10H,
11H, 12H, 13H

Well Class: HORIZONTAL

Number of Legs:

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town:

Distance to nearest well: 85 FT

Distance to lease line: 350 FT

Reservoir well spacing assigned acres Measurement: 354.28 Acres

Well plat: Davinci 7-18 Fed Com 6H_C-102 Plat_12-07-2016.pdf

Well work start Date: 05/01/2017

Duration: 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

STATE: NEW MEXICO

Meridian: NEW MEXICO PRINCIPAL **County:** EDDY

Latitude: 32.152739

Longitude: -104.234144

SHL

Elevation: 3281

MD: 0

TVD: 0

Leg #: 1

Lease Type: FEDERAL

Lease #: NMNM110348

NS-Foot: 350

NS Indicator: FSL

EW-Foot: 1190

EW Indicator: FWL

Twsp: 25S

Range: 27E

Section: 6

Aliquot:

Lot: 7

Tract:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: EDDY
	Latitude: 32.152739	Longitude: -104.234144	
KOP	Elevation: -5700	MD: 8981	TVD: 8981
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM110348	
	NS-Foot: 350	NS Indicator: FSL	
	EW-Foot: 1190	EW Indicator: FWL	
	Twsp: 25S	Range: 27E	Section: 6
	Aliquot:	Lot: 7	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: EDDY
	Latitude: 32.14444	Longitude: -104.237172	
PPP	Elevation: -6408	MD: 13000	TVD: 9689
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM93471	
	NS-Foot: 2640	NS Indicator: FNL	
	EW-Foot: 205	EW Indicator: FWL	
	Twsp: 25S	Range: 27E	Section: 7
	Aliquot:	Lot: 3	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: EDDY
	Latitude: 32.1370222	Longitude: -104.23717	
PPP	Elevation: -6430	MD: 15700	TVD: 9711
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM94842	
	NS-Foot: 0	NS Indicator: FNL	
	EW-Foot: 250	EW Indicator: FWL	
	Twsp: 25S	Range: 27E	Section: 18
	Aliquot:	Lot: 1	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: EDDY
	Latitude: 32.1527389	Longitude: -104.2341444	
PPP	Elevation: -5219	MD: 8500	TVD: 8500
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM110348	
	NS-Foot: 350	NS Indicator: FSL	
	EW-Foot: 1190	EW Indicator: FWL	

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Twsp: 25S **Range:** 27E **Section:** 6
Aliquot: **Lot:** 7 **Tract:**

STATE: NEW MEXICO **Meridian:** NEW MEXICO PRINCIPAL **County:** EDDY
Latitude: 32.1515806 **Longitude:** -104.237077

PPP **Elevation:** -6380 **MD:** 10400 **TVD:** 9661

Leg #: 1 **Lease Type:** FEDERAL **Lease #:** NMNM92167

NS-Foot: 0 **NS Indicator:** FNL

EW-Foot: 1274 **EW Indicator:** FWL

Twsp: 25S **Range:** 27E **Section:** 7
Aliquot: **Lot:** 1 **Tract:**

STATE: NEW MEXICO **Meridian:** NEW MEXICO PRINCIPAL **County:** EDDY
Latitude: 32.123531 **Longitude:** -104.237167

EXIT **Elevation:** -6469 **MD:** 20609 **TVD:** 9750

Leg #: 1 **Lease Type:** FEDERAL **Lease #:** NMNM111530

NS-Foot: 330 **NS Indicator:** FSL

EW-Foot: 250 **EW Indicator:** FWL

Twsp: 25S **Range:** 27E **Section:** 18
Aliquot: **Lot:** 4 **Tract:**

STATE: NEW MEXICO **Meridian:** NEW MEXICO PRINCIPAL **County:** EDDY
Latitude: 32.123531 **Longitude:** -104.237167

BHL **Elevation:** -6469 **MD:** 20609 **TVD:** 9750

Leg #: 1 **Lease Type:** FEDERAL **Lease #:** NMNM111530

NS-Foot: 330 **NS Indicator:** FSL

EW-Foot: 250 **EW Indicator:** FWL

Twsp: 25S **Range:** 27E **Section:** 18
Aliquot: **Lot:** 4 **Tract:**

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Section 1 - Geologic Formations

ID: Surface formation

Name: RUSTLER

Lithology(ies):

Elevation: 3281

True Vertical Depth: 0

Measured Depth: 0

Mineral Resource(s):

USEABLE WATER

Is this a producing formation? N

ID: Formation 1

Name: SALADO

Lithology(ies):

Elevation: 2081

True Vertical Depth: 1200

Measured Depth: 1200

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: CASTILE

Lithology(ies):

Elevation: 1546

True Vertical Depth: 1735

Measured Depth: 1735

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 3

Name: BELL CANYON

Lithology(ies):

Elevation: 1271

True Vertical Depth: 2010

Measured Depth: 2010

Mineral Resource(s):

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 4

Name: CHERRY CANYON

Lithology(ies):

Elevation: 431

True Vertical Depth: 2850

Measured Depth: 2850

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 5

Name: BRUSHY CANYON

Lithology(ies):

Elevation: -649

True Vertical Depth: 3930

Measured Depth: 3930

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 6

Name: BONE SPRING

Lithology(ies):

Elevation: -2169

True Vertical Depth: 5450

Measured Depth: 5450

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

ID: Formation 7

Name: BONE SPRING 1ST

Lithology(ies):

Elevation: -3099

True Vertical Depth: 6380

Measured Depth: 6380

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8

Name: BONE SPRING 2ND

Lithology(ies):

Elevation: -3369

True Vertical Depth: 6650

Measured Depth: 6650

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 9

Name: BONE SPRING 3RD

Lithology(ies):

Elevation: -4029

True Vertical Depth: 7310

Measured Depth: 7310

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 10

Name: WOLFCAMP

Lithology(ies):

Elevation: -5219

True Vertical Depth: 8500

Measured Depth: 8500

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M

Rating Depth: 450

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. 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 clock 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.

Requesting Variance? YES

Variance request: 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. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's 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. On the Production casing, pressure tests will be made to 250 psi low and 5000 psi high. The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, 250 psi low and 1500 psi high on the intermediate casing and 250 psi low and 2500 psi high on the production casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

Davinci 7-18 Fed Com 6H_2M 3M Choke_12-07-2016.pdf

BOP Diagram Attachment:

Davinci 7-18 Fed Com 6H_2M BOP_12-07-2016.pdf

Pressure Rating (PSI): 3M

Rating Depth: 1990

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. 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 clock 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.

Requesting Variance? YES

Variance request: 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. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's 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 psi low and 1500 psi high on the intermediate casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Choke Diagram Attachment:

Davinci 7-18 Fed Com 6H_2M 3M Choke_12-07-2016.pdf

BOP Diagram Attachment:

Davinci 7-18 Fed Com 6H_3M BOP_12-07-2016.pdf

Pressure Rating (PSI): 5M

Rating Depth: 20609

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. 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 clock 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.

Requesting Variance? YES

Variance request: 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. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's 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. On the Production casing, pressure tests will be made to 250 psi low and 5000 psi high. The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, 250 psi low and 1500 psi high on the intermediate casing and 250 psi low and 2500 psi high on the production casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

Davinci 7-18 Fed Com 6H_5M Choke_12-07-2016.pdf

BOP Diagram Attachment:

Davinci 7-18 Fed Com 6H_5M BOP_12-07-2016.pdf

Section 3 - Casing

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -6430

Bottom setting depth MD: 450

Bottom setting depth TVD: 450

Bottom setting depth MSL: -6880

Calculated casing length MD: 450

Casing Size: 13.375

Other Size

Grade: OTHER

Other Grade: H-40/J-55 Hybrid

Weight: 48

Joint Type: STC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 3.6

Burst Design Safety Factor: 3.6

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 17.16

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 17.16

Casing Design Assumptions and Worksheet(s):

Davinci 7-18 Fed Com 6H_Casing Acceptations_12-07-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

String Type: INTERMEDIATE

Other String Type:

Hole Size: 12.25

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -6430

Bottom setting depth MD: 1990

Bottom setting depth TVD: 1990

Bottom setting depth MSL: -8420

Calculated casing length MD: 1990

Casing Size: 9.625

Other Size

Grade: J-55

Other Grade:

Weight: 36

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.91

Burst Design Safety Factor: 3.33

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 7.49

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 7.49

Casing Design Assumptions and Worksheet(s):

Davinci 7-18 Fed Com 6H_Casing Acceptations_12-07-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 8981

Top setting depth TVD: 8981

Top setting depth MSL: -15411

Bottom setting depth MD: 9738

Bottom setting depth TVD: 9738

Bottom setting depth MSL: -16168

Calculated casing length MD: 757

Casing Size: 7.0

Other Size

Grade: L-80

Other Grade:

Weight: 32

Joint Type: BUTT

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.89

Burst Design Safety Factor: 1.85

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 48.8

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 48.8

Casing Design Assumptions and Worksheet(s):

Davinci 7-18 Fed Com 6H_Casing Acceptions_12-07-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -6430

Bottom setting depth MD: 8981

Bottom setting depth TVD: 8981

Bottom setting depth MSL: -15411

Calculated casing length MD: 8981

Casing Size: 7.0

Other Size

Grade: L-80

Other Grade:

Weight: 32

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 2

Burst Design Safety Factor: 2.11

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 2.56

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 2.56

Casing Design Assumptions and Worksheet(s):

Davinci 7-18 Fed Com 6H_Casing Acceptions_12-07-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

String Type: COMPLETION SYSTEM **Other String Type:**

Hole Size: 6

Top setting depth MD: 8981

Top setting depth TVD: 8981

Top setting depth MSL: -15411

Bottom setting depth MD: 20609

Bottom setting depth TVD: 20609

Bottom setting depth MSL: -27039

Calculated casing length MD: 11628

Casing Size: 4.5

Other Size

Grade: P-110

Other Grade:

Weight: 11.6

Joint Type: BUTT

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.2

Burst Design Safety Factor: 1.69

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 50.84

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 50.84

Casing Design Assumptions and Worksheet(s):

Davinci 7-18 Fed Com 6H_Casing Acceptations_12-07-2016.pdf

Section 4 - Cement

Casing String Type: SURFACE

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 450

Cement Type: Class C

Additives: Bentonite

Quantity (sks): 91

Yield (cu.ff./sk): 1.72

Density: 13.5

Volume (cu.ft.): 156

Percent Excess: 50

Tail

Top MD of Segment: 0

Bottom MD Segment: 450

Cement Type: Class C

Additives: LCM

Quantity (sks): 195

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 260

Percent Excess: 25

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 1990

Cement Type: 35:65 (poz:C)

Additives: Salt, Bentonite

Quantity (sks): 376

Yield (cu.ff./sk): 1.88

Density: 12.9

Volume (cu.ft.): 706

Percent Excess: 50

Tail

Top MD of Segment: 0

Bottom MD Segment: 1990

Cement Type: Class C

Additives: LCM

Quantity (sks): 116

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 155

Percent Excess: 25

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 8981

Cement Type: Tuned Light I Class H

Additives: N/A

Quantity (sks): 574

Yield (cu.ff./sk): 2.35

Density: 10.8

Volume (cu.ft.): 1347

Percent Excess: 25

Tail

Top MD of Segment: 8981

Bottom MD Segment: 9738

Cement Type: 50:50 (poz:H)

Additives: Salt, Bentonite, Fluid loss,
Dispersant, SMS

Quantity (sks): 97

Yield (cu.ff./sk): 1.3

Density: 14.2

Volume (cu.ft.): 126

Percent Excess: 10

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Stage Tool Depth:

Lead

Top MD of Segment: 0	Bottom MD Segment: 8981	Cement Type: Tuned Light I Class H
Additives: N/A	Quantity (sks): 574	Yield (cu.ff./sk): 2.35
Density: 10.8	Volume (cu.ft.): 1347	Percent Excess: 25

Tail

Top MD of Segment: 8981	Bottom MD Segment: 9738	Cement Type: 50:50 (poz:H)
Additives: Salt, Bentonite, Fluid Loss, Dispersant, SMS	Quantity (sks): 97	Yield (cu.ff./sk): 1.3
Density: 14.2	Volume (cu.ft.): 126	Percent Excess: 10

Casing String Type: COMPLETION SYSTEM

Stage Tool Depth:

Lead

Top MD of Segment: 8981	Bottom MD Segment: 20609	Cement Type: 50:50 (Poz:H)
Additives: Salt, Bentonite, Fluid Loss, Dispersant, SMS	Quantity (sks): 730	Yield (cu.ff./sk): 1.3
Density: 14.2	Volume (cu.ft.): 948	Percent Excess: 10

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: 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.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Top Depth: 0

Bottom Depth: 450

Mud Type: SPUD MUD

Min Weight (lbs./gal.): 8.1

Max Weight (lbs./gal.): 8.6

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Top Depth: 450

Bottom Depth: 1990

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 9.7

Max Weight (lbs./gal.): 10.2

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Top Depth: 1990

Bottom Depth: 9738

Mud Type: OTHER

FW/ Cut Brine

Min Weight (lbs./gal.): 8.7

Max Weight (lbs./gal.): 9.2

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Top Depth: 10590

Bottom Depth: 20609

Mud Type: OIL-BASED MUD

Min Weight (lbs./gal.): 12

Max Weight (lbs./gal.): 12.5

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No DST Planned

List of open and cased hole logs run in the well:

CNL,DS,GR

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4562

Anticipated Surface Pressure: 2417

Anticipated Bottom Hole Temperature(F): 158

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Lost circulation may be encountered in the Delaware mountain group. Abnormal pressure as well as hole stability issues may be encountered in the Wolfcamp.

Contingency Plans geohazards description:

Lost circulation material will be available, as well as additional drilling fluid along with the fluid volume in the drilling rig pit system. Drilling fluid can be mixed on location or mixed in vendor mud plant and trucked to location if needed. Sufficient barite will be available to maintain appropriate mud weight for the Wolfcamp interval.

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Davinci 7-18 Fed Com 6H_H2S Plan_12-07-2016.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Davinci 7-18 Fed Com 6H_Directional Prelim_12-07-2016.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Davinci 7-18 Fed Com 6H_Drilling Plan_12-07-2016.pdf

Other Variance attachment:

Davinci 7-18 Fed Com 6H_Flex Hose_12-07-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Section 1 - Existing Roads

Will existing roads be used? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Davinci 7-18 Fed Com 6H_Road ROW_12-09-2016.pdf

New road type: COLLECTOR

Length: 431.23 Feet **Width (ft.):** 30

Max slope (%): 2 **Max grade (%):** 6

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: The side slopes of any drainage channels or swales that are crossed will be re-contoured to original grade and compacted and mulched as necessary to avoid erosion. Where steeper slopes cannot be avoided, water bars or silt fence will be constructed, mulch/rip-rap applied, or other measures employed as necessary to control erosion. Hay bales, straw wattles or silt fence may also be installed to control erosion as needed. All disturbed areas will be seeded with a mix appropriate for the area unless specified otherwise by the landowner.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: GRAVEL

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Push off and stockpile alongside the location.

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

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

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT,LOW WATER

Drainage Control comments: To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

Road Drainage Control Structures (DCS) description: n/a

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Davinci 7-18 Fed Com 6H_One Mile Radius Map_12-09-2016.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

Production Facilities description:

Production Facilities map:

Davinci 7-18 Fed Com 6H_Prod facilities_12-09-2016.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Water source use type: INTERMEDIATE/PRODUCTION CASING,
SURFACE CASING

Water source type: MUNICIPAL

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type: WATER RIGHT

Permit Number:

Source land ownership: FEDERAL

Water source transport method: PIPELINE, TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 5000

Source volume (acre-feet): 0.6444655

Source volume (gal): 210000

Water source and transportation map:

Davinci 7-18 Fed Com 6H_Water Route_12-09-2016.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Section 6 - Construction Materials

Construction Materials description: The drilling and testing operations will be conducted on a watered and compacted native soil grade. Soft spots will be covered with scoria, free of large rocks (3" diameter). Upon completion as a commercial producer the location will be covered with scoria, free of large rocks (3" dia.) from an existing privately owned gravel pit.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling Fluids, drill cuttings, water and other waste produced from the well during drilling operations.

Amount of waste: 15000 barrels

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Haul to R360 commercial disposal.

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 32500 pounds

Waste disposal frequency : Weekly

Safe containment description: n/a

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Windmill Spraying Service hauls trash to Lea County Landfill

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Davinci 7-18 Fed Com 6H_Wellsite Layout_12-09-2016.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

during construction that are no longer needed for operations would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

Drainage/Erosion control reclamation: All disturbed and re-contoured areas would be reseeded according to specifications. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage.

Wellpad long term disturbance (acres): 6.4

Wellpad short term disturbance (acres): 6.4

Access road long term disturbance (acres): 0.296

Access road short term disturbance (acres): 0.296

Pipeline long term disturbance (acres): 10.3606615

Pipeline short term disturbance (acres): 10.3606615

Other long term disturbance (acres): 4.145

Other short term disturbance (acres): 4.145

Total long term disturbance: 21.201662

Total short term disturbance: 21.201662

Reconstruction method: After well plugging, all disturbed areas would be returned to the original contour or a contour that blends with the surrounding landform including roads unless the surface owner requests that they be left intact. In consultation with the surface owners it will be determined if any gravel or similar materials used to reinforce an area are to be removed, buried, or left in place during final reclamation. Salvaged topsoil, if any, would be re-spread evenly over the surfaces to be re-vegetated. As necessary, the soil surface would be prepared to provide a seedbed for re-establishment of desirable vegetation. Site preparation may include gouging, scarifying, dozer track-walking, mulching, or fertilizing.

Reclamation, Re-vegetation, and Drainage: All disturbed and recontoured areas would be reseeded using techniques outlined under Phase I and II of this plan or as specified by the land owner. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage.

Topsoil redistribution: Salvaged topsoil, if any, would be re-spread evenly over the surfaces to be re-vegetated.

Soil treatment: As necessary, the soil surface would be prepared to provide a seedbed for re-establishment of desirable vegetation. Site preparation may include gouging, scarifying, dozer track-walking, mulching or fertilizing.

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre
-----------	-------------

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: n/a

Weed treatment plan attachment:

Monitoring plan description: n/a

Monitoring plan attachment:

Success standards: n/a

Pit closure description: n/a

Pit closure attachment:

Section 11 - Surface Ownership

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? YES

Use APD as ROW? YES

ROW Type(s): 281001 ROW - ROADS,288100 ROW – O&G Pipeline,288101 ROW – O&G Facility Sites,288103 ROW – Salt Water Disposal Pipeline/Facility,289001 ROW- O&G Well Pad,FLPMA (Powerline)

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite with BLM (Jeff Robertson and BLM realty staff Robert Gomez and Brittany Chavez) and Cimarex (Barry Hunt) on October 6, 2016. Top soil north. No Interim reclamation. No V-Door or Frac pad designation. Construct a ditch and berm system on northeast corner of pad to divert water run-off from pad. Access road and gas lift/Production line from southeast corner, southeast, to lease road and to off-site battery.

Other SUPO Attachment

Davinci 7-18 Fed Com 6H_Buy Back Line ROW_12-09-2016.pdf

Davinci 7-18 Fed Com 6H_Gas Lift and Flow line ROW_12-09-2016.pdf

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Davinci 7-18 Fed Com 6H_Gas Sales ROW_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_Power line ROW_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_Public Access Road_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_Road Description_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_SWD line ROW_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_Topographic Map_12-09-2016.pdf
Davinci 7-18 Fed Com 6H_SUPO_12-09-2016.pdf

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001188

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Operator 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.

NAME: Aricka Easterling

Signed on: 12/09/2016

Title: Regulatory Analyst

Street Address: 202 S. Cheyenne Ave, Ste 1000

Operator Name: CIMAREX ENERGY CO

Well Name: DAVINCI 7-18 FEDERAL COM

Well Number: 6H

City: Tulsa

State: OK

Zip: 74103

Phone: (918)560-7060

Email address: aeasterling@cimarex.com

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

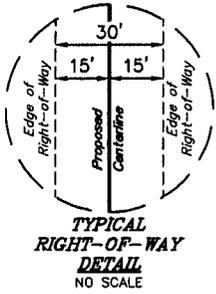
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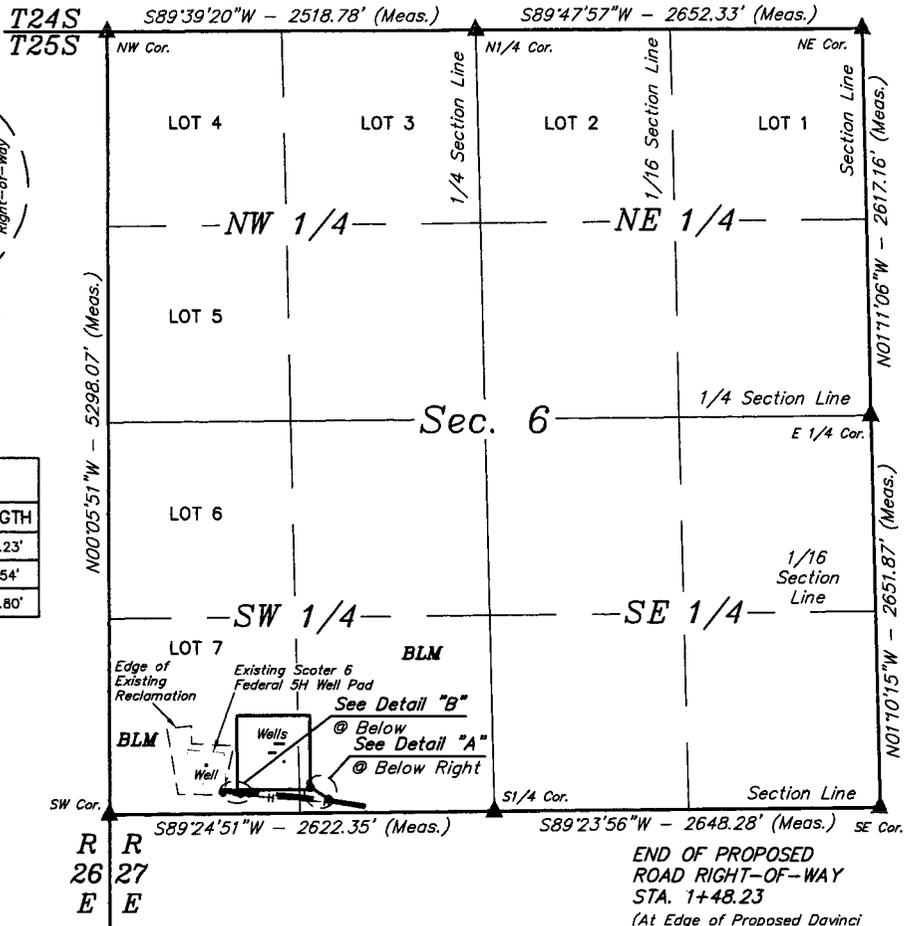
Payment

APD Fee Payment Method: PAY.GOV

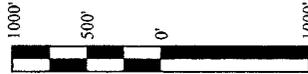
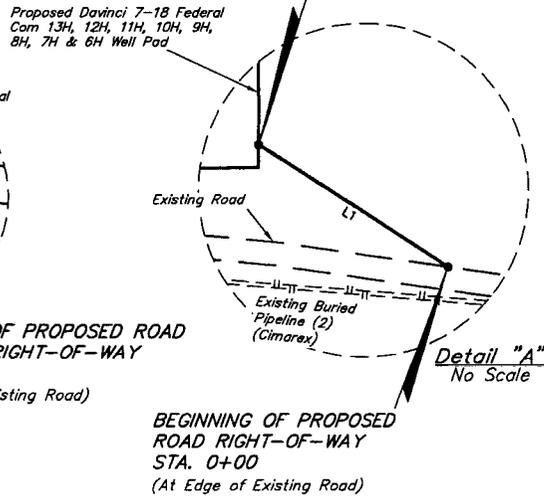
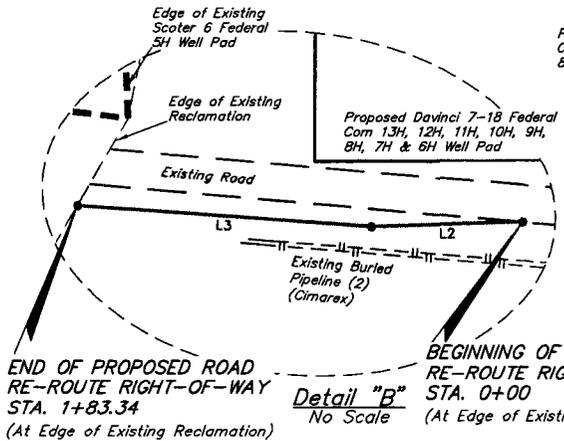
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LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N57°39'04"W	148.23'
L2	S88°19'07"W	62.54'
L3	N85°59'06"W	120.80'



**END OF PROPOSED
ROAD RIGHT-OF-WAY
STA. 1+48.23**
 (At Edge of Proposed Davinci
7-18 Federal Com 13H, 12H, 11H,
10H, 9H, 8H, 7H & 6H Well Pad)



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
ACCESS ROAD (SW 1/4)	BLM	148.23	8.98	0.102
ROAD RE-ROUTE (SW 1/4)	BLM	183.34	11.11	0.126
TOTAL		331.57	20.09	0.228

▲ = SECTION CORNERS LOCATED.

NOTES:

- The maximum grade of existing ground for the proposed access road is ±1.0%.
- The maximum grade of existing ground for the proposed road re-route is ±2.8%.
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)



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

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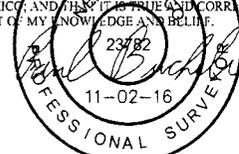
Sheet 1 of 2

CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 1000'
ACCESS ROAD R-O-W		EXHIBIT C-2	

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



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 SE 1/4 SW 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N85°51'48"W 1130.10' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE N57°39'04"W 148.23' TO A POINT IN THE SE 1/4 SW 1/4 OF SAID SECTION 6, WHICH BEARS N82°40'55"W 1262.67' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. 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 0.102 ACRES MORE OR LESS.

BEGINNING OF ROAD STA. 0+00 BEARS N85°51'48"W 1130.10' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF ROAD STA. 1+48.23 BEARS N82°40'55"W 1262.67' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

ROAD RE-ROUTE RIGHT-OF-WAY DESCRIPTION

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

BEGINNING AT A POINT IN LOT 7 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N81°17'42"E 966.91' FROM THE SOUTHWEST CORNER OF SAID SECTION 6, THENCE S88°19'07"W 62.54'; THENCE N85°59'06"W 120.80' TO A POINT IN LOT 7 OF SAID SECTION 6, WHICH BEARS N78°48'12"E 787.75' FROM THE SOUTHWEST CORNER OF SAID SECTION 6. 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 0.126 ACRES MORE OR LESS.

BEGINNING OF ROAD RE-ROUTE STA. 0+00 BEARS N81°17'42"E 966.91' FROM THE SOUTHWEST CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

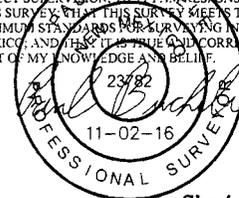
END OF ROAD RE-ROUTE STA. 1+83.34 BEARS N78°48'12"E 787.75' FROM THE SOUTHWEST CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H ACCESS ROAD R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	2.5" IRON PIPE WITH BRASS CAP	N 32°09'58.69"	W 104°14'16.85"
N1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T25S, R27E	1.5" IRON PIPE WITH BRASS CAP	N 32°09'58.93"	W 104°13'16.71"
E1/4 COR. SEC. 6, T25S, R27E	1/2" IRON PIPE WITH BRASS CAP	N 32°09'33.04"	W 104°13'16.08"
SE COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
S1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
SW COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H ACCESS ROAD R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°09'07.34"	W 104°13'59.36"
END	1+48.23	N 32°09'08.13"	W 104°14'00.82"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H ROAD RE-ROUTE ROAD R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°09'07.72"	W 104°14'05.63"
1	0+62.54	N 32°09'07.70"	W 104°14'06.36"
END	1+83.34	N 32°09'07.79"	W 104°14'07.76"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY OF THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61135-A2

Sheet 2 of 2



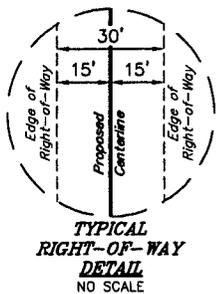
CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H. J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A
ACCESS ROAD R-O-W		EXHIBIT C-2	



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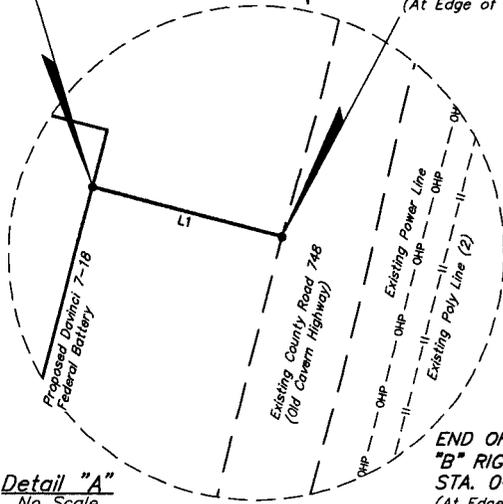


LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N75°19'41"W	49.81'
L2	N75°27'45"W	49.85'

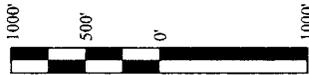
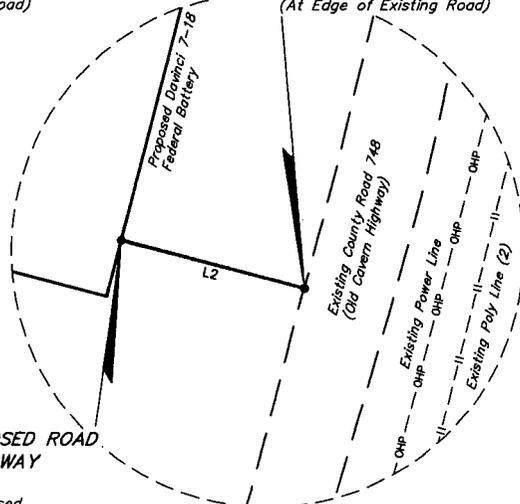
END OF PROPOSED ROAD
"A" RIGHT-OF-WAY
STA. 0+49.81
(At Edge of Proposed
Davinci 7-18 Federal Battery)

BEGINNING OF PROPOSED
ROAD "A" RIGHT-OF-WAY
STA. 0+00
(At Edge of Existing Road)

BEGINNING OF PROPOSED
ROAD "B" RIGHT-OF-WAY
STA. 0+00
(At Edge of Existing Road)



END OF PROPOSED ROAD
"B" RIGHT-OF-WAY
STA. 0+49.85
(At Edge of Proposed
Davinci 7-18 Federal Battery)



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
ACCESS ROAD "A" (NW 1/4)	BLM	49.81	3.02	0.034
ACCESS ROAD "B" (NW 1/4)	BLM	49.85	3.02	0.034
TOTAL		99.66	6.04	0.068

▲ = SECTION CORNERS LOCATED.

NOTES:

- The maximum grade of existing ground for proposed access road "A" is ±2.5%.
- The maximum grade of existing ground for proposed access road "B" is ±1.7%.
- Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)



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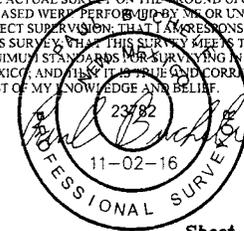
FILE: 61146-A1

CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'
ACCESS ROAD R-O-W		EXHIBIT C-2	

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Sheet 1 of 2

ROAD "A" 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 7, T25S, R27E, N.M.P.M., WHICH BEARS S29°21'46"W 1235.56' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE N75°19'41"W 49.81' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 12, WHICH BEARS S31°34'25"W 1249.13' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7. 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 0.034 ACRES MORE OR LESS.

BEGINNING OF ROAD "A" STA. 0+00 S29°21'46"W 1235.56' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF ROAD "A" STA. 0+49.81 BEARS S31°34'25"W 1249.13' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

ROAD "B" 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 SE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S25°57'47"W 1595.92' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE N75°27'45"W 49.85' TO A POINT IN THE SE 1/4 NW 1/4 OF SAID SECTION 7, WHICH BEARS S27°42'22"W 1606.54' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7. 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 0.034 ACRES MORE OR LESS.

BEGINNING OF ROAD "B" STA. 0+00 BEARS S25°57'47"W 1595.92' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

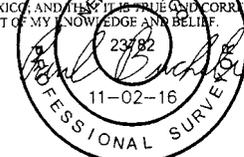
END OF ROAD "B" STA. 0+49.85 BEARS S27°42'22"W 1606.54' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY ACCESS ROAD R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL BATTERY ACCESS ROAD R-O-W "A"			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°08'55.88"	W 104°13'53.30"
END	0+49.81	N 32°08'56.01"	W 104°13'53.86"

DAVINCI 7-18 FEDERAL BATTERY ACCESS ROAD R-O-W "B"			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°08'52.34"	W 104°13'54.38"
END	0+49.85	N 32°08'52.46"	W 104°13'54.94"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61146-A1

Sheet 2 of 2

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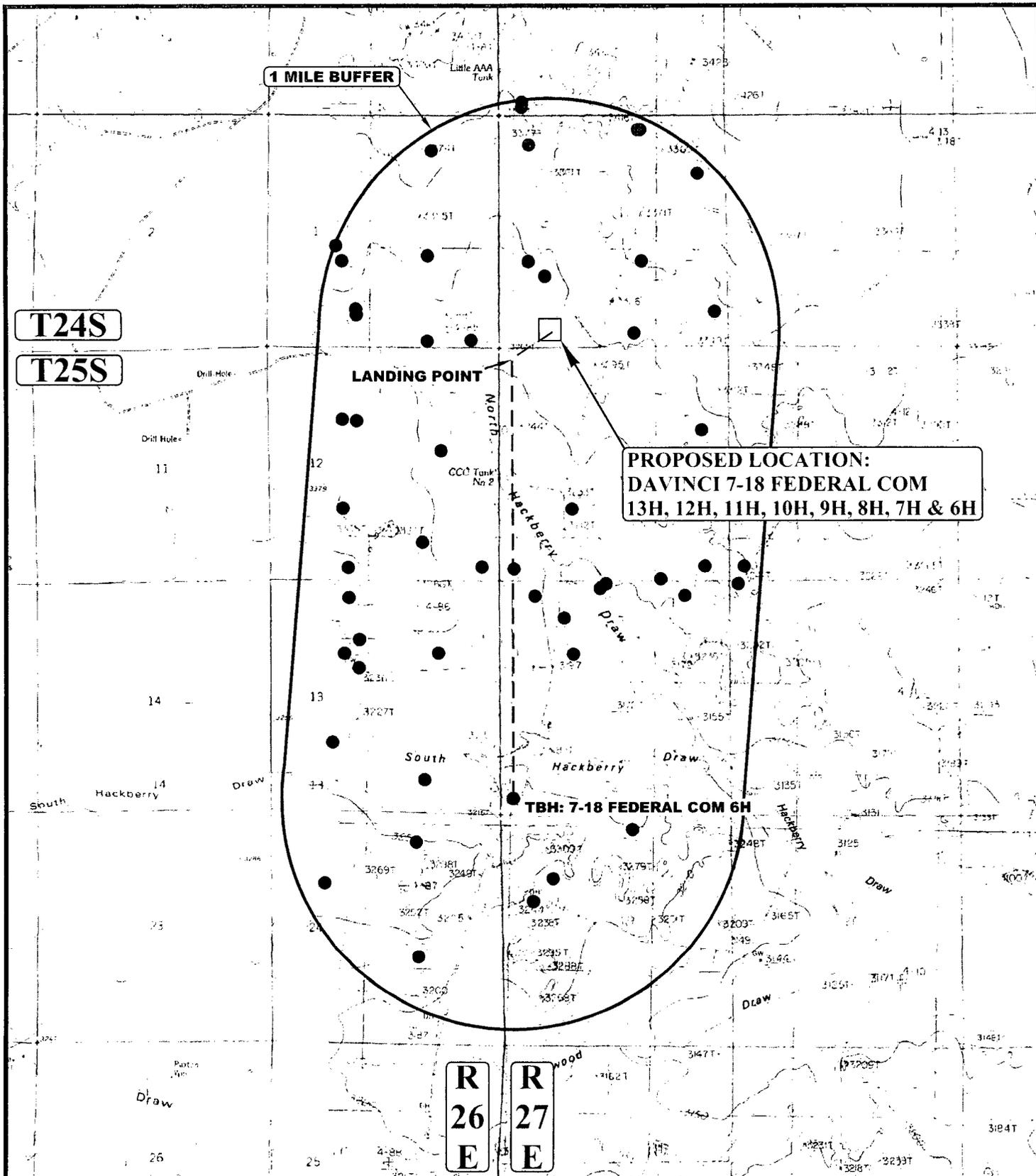
CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
 SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A
ACCESS ROAD R-O-W		EXHIBIT C-2	



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LEGEND:

- EXISTING WELLS



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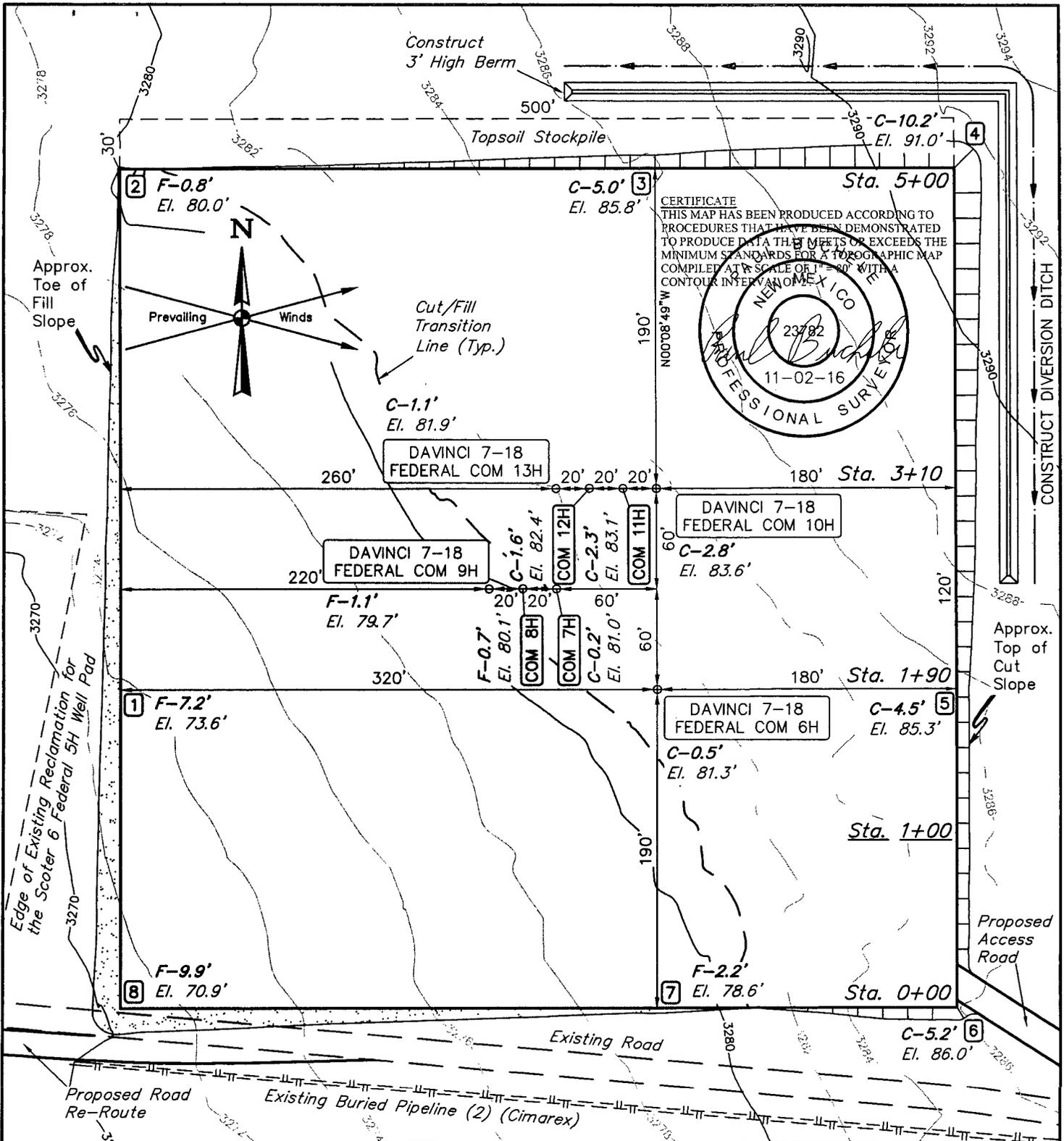


CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	T.J.	10-28-16	1:36,000

ONE MILE RADIUS PLAT EXHIBIT A



CERTIFICATE
 THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 80' WITH A CONTOUR INTERVAL OF 1'.

NEW MEXICO
 23782
 PROFESSIONAL SURVEYOR
 11-02-16

NOTE: Earthwork calculations require a fill @ some location stakes for balance. All fill is to be compacted to a minimum of 95% of the maximum dry density obtained by AASHTO method t-99.

FINISHED GRADE ELEVATION = 3280.8'

- NOTES:**
- Contours shown at 2' intervals.
 - Cut/Fill slopes 1 1/2:1 (Typ. except where noted)
 - Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.



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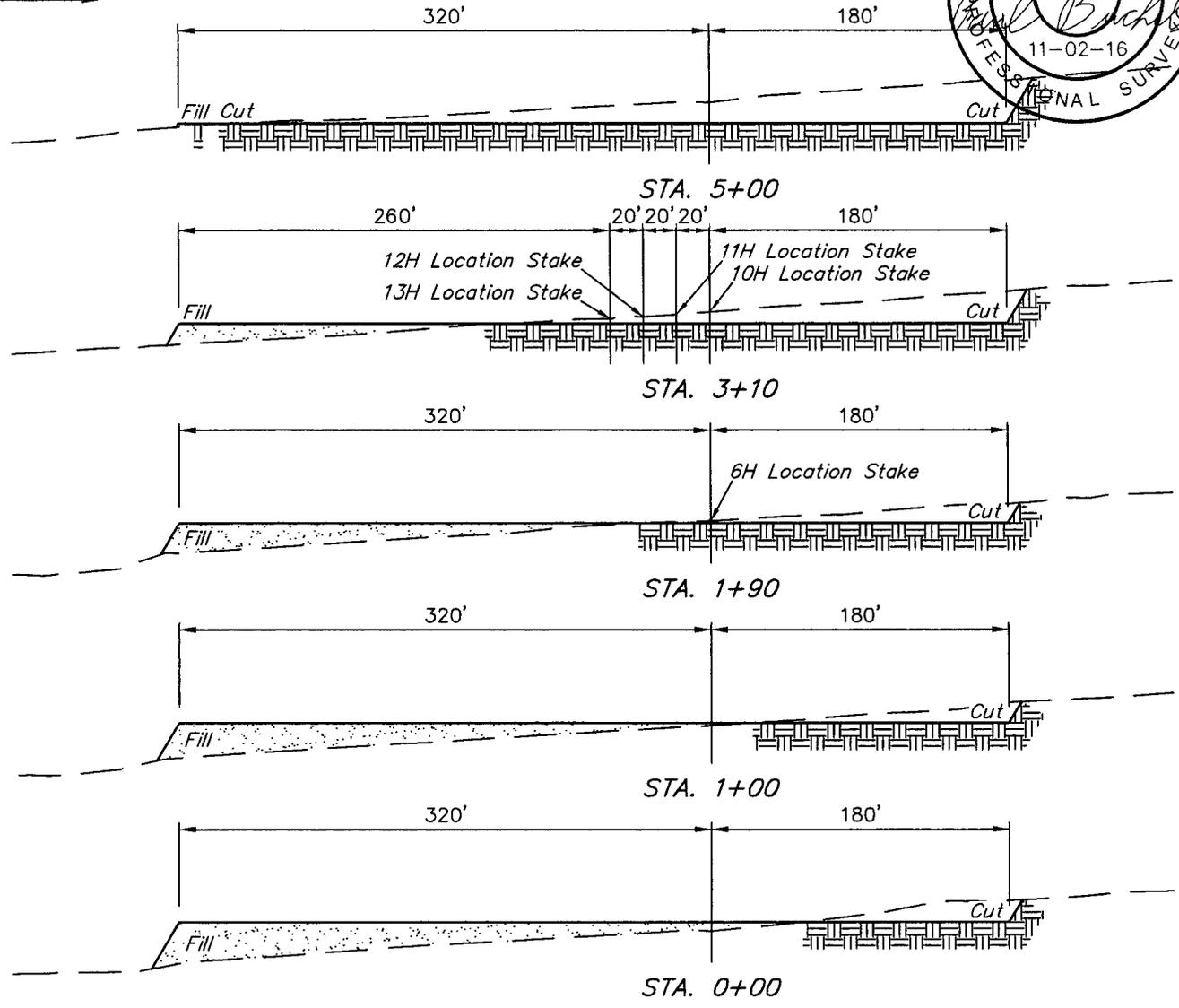
CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 80'

LOCATION LAYOUT EXHIBIT D

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



APPROXIMATE EARTHWORK QUANTITIES	
(3") TOPSOIL STRIPPING	2,470 Cu. Yds.
REMAINING LOCATION	17,800 Cu. Yds.
TOTAL CUT	20,270 Cu. Yds.
FILL	17,800 Cu. Yds.
EXCESS MATERIAL	2,470 Cu. Yds.
TOPSOIL	2,470 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	0 Cu. Yds.

APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	ACRES
WELL SITE DISTURBANCE	NA	±6.400
30' WIDE ACCESS ROAD R-O-W DISTURBANCE	±331.57'	±0.228
30' WIDE PRODUCTION FLOW LINE R-O-W DISTURBANCE	±1,759.69'	±1.212
30' WIDE GAS LIFT FLOW LINE R-O-W DISTURBANCE	±1,774.50'	±1.222
TOTAL SURFACE USE AREA		±9.062

NOTES:

- Fill quantity includes 5% for compaction.
- Cut/Fill slopes 1 1/2:1 (Typ. except where noted)

CIMAREX ENERGY CO.

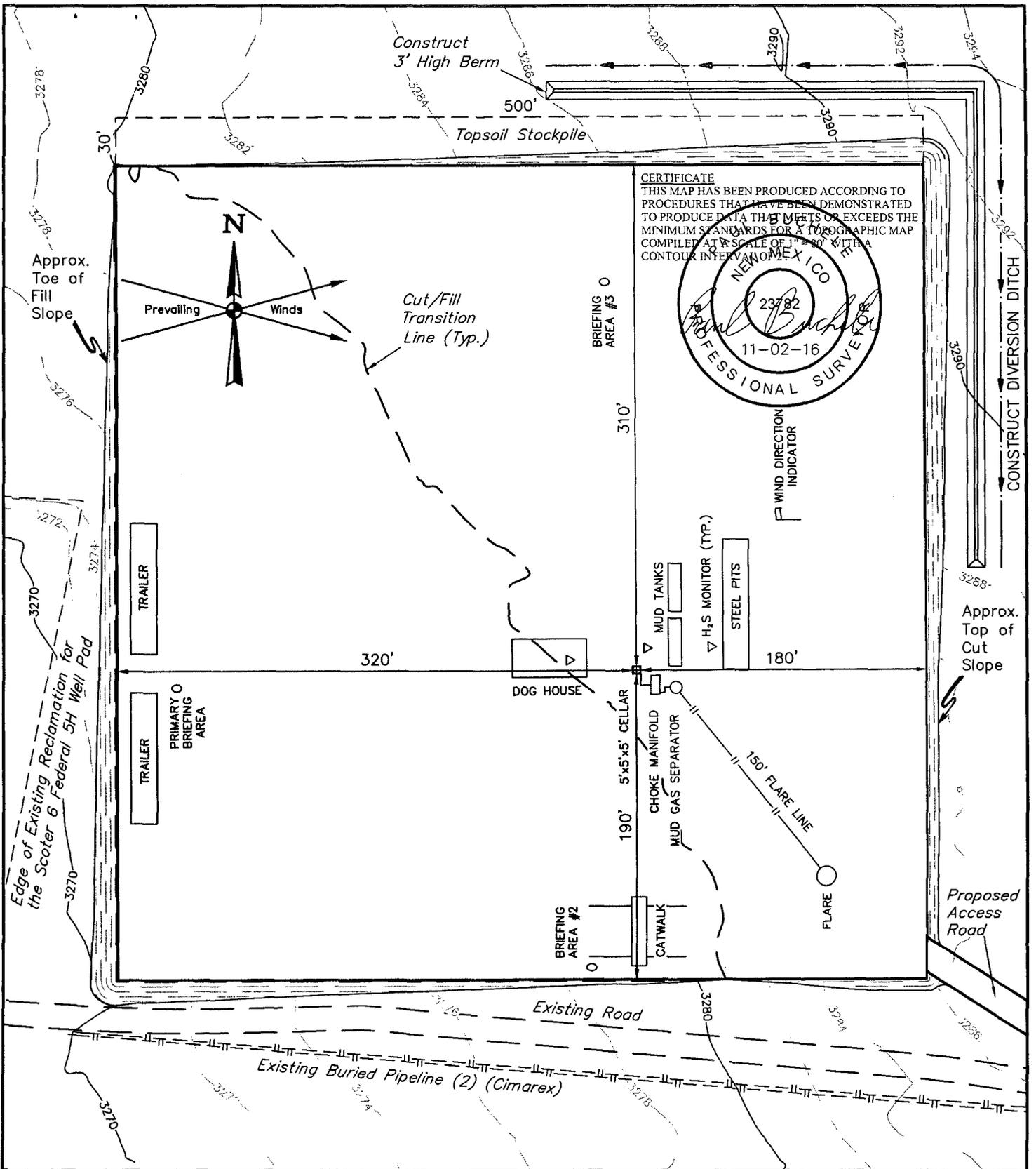
DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	AS SHOWN

TYPICAL CROSS SECTIONS EXHIBIT D



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NOTES:

- Contours shown at 2' intervals.

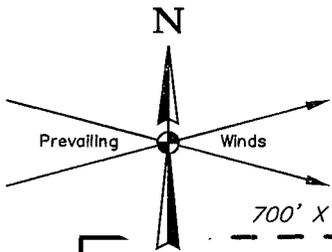
CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL COM 6H
 350' FSL 1190' FWL
 LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO



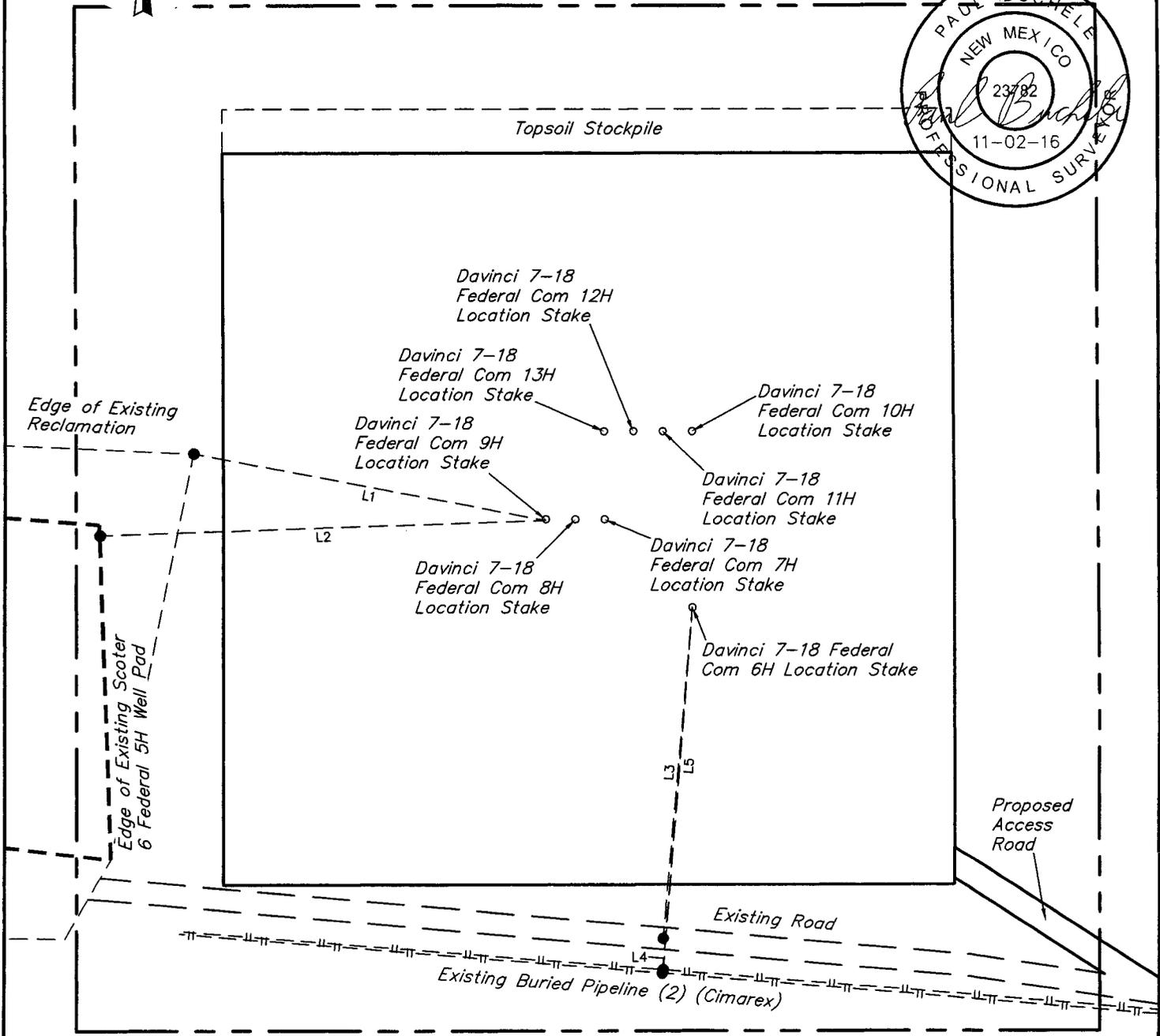
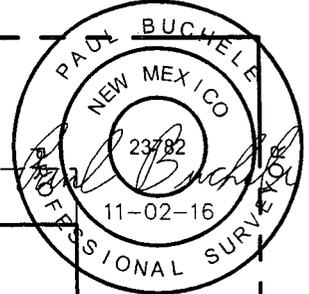
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SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 80'
TYPICAL RIG LAYOUT			EXHIBIT D



700' X 700' Archaeological Survey Boundary

LINE TABLE			LINE TABLE		
LINE	DIRECTION	LENGTH	LINE	DIRECTION	LENGTH
L1	N79°W	244'	L4	S05°W	251'
L2	S88°W	304'	L5	S04°W	249'
L3	S05°W	228'			



NOTES:

CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

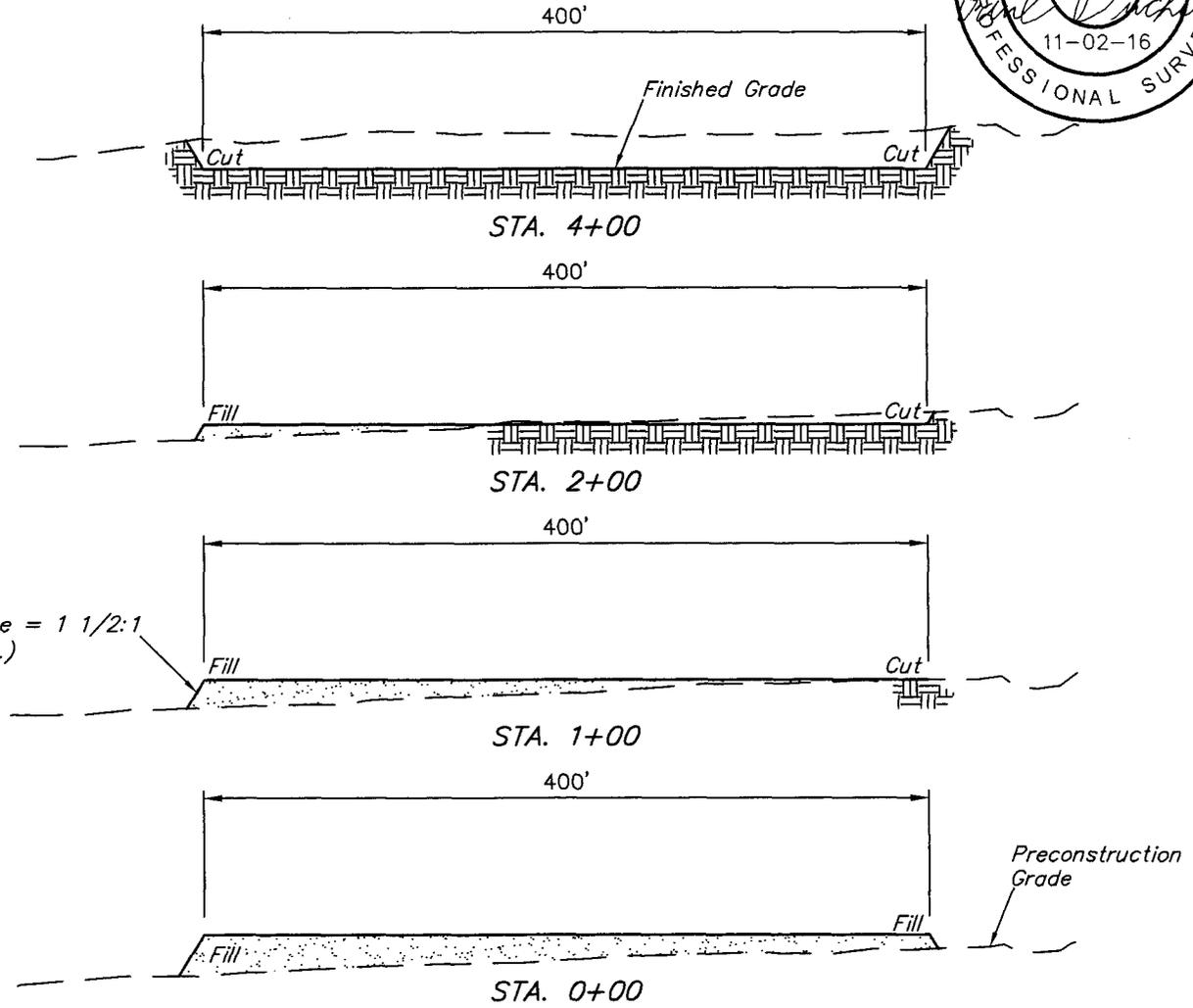
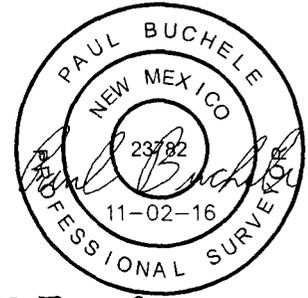


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SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 100'

ARCHAEOLOGICAL SURVEY BOUNDARY EXHIBIT D

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



APPROXIMATE EARTHWORK QUANTITIES	
(3") TOPSOIL STRIPPING	1,610 Cu. Yds.
REMAINING LOCATION	10,870 Cu. Yds.
TOTAL CUT	12,480 Cu. Yds.
FILL	10,870 Cu. Yds.
EXCESS MATERIAL	1,610 Cu. Yds.
TOPSOIL	1,610 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	0 Cu. Yds.

APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	ACRES
WELL SITE DISTURBANCE	NA	±4.145
30' WIDE ACCESS ROAD R-O-W DISTURBANCE	±99.66'	±0.068
30' WIDE SWD PIPELINE R-O-W DISTURBANCE	±4,828.02'	±3.325
30' WIDE GAS LIFT PIPELINE R-O-W DISTURBANCE	±3,343.23'	±2.303
30' WIDE GAS SALES PIPELINE R-O-W DISTURBANCE	±3,338.24'	±2.299
30' WIDE POWER LINE R-O-W DISTURBANCE	±5,123.91'	±3.529
TOTAL SURFACE USE AREA		±15.669

NOTES:

- Fill quantity includes 5% for compaction.
- Cut/Fill slopes 1 1/2:1 (Typ. except where noted)

CIMAREX ENERGY CO.

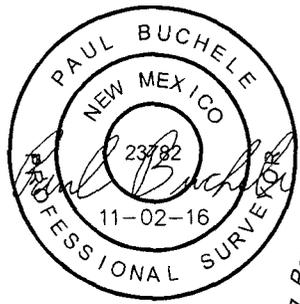
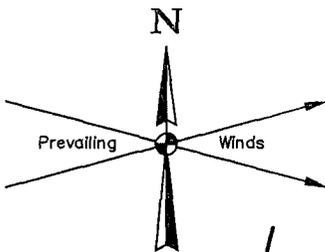
DAVINCI 7-18 FEDERAL BATTERY
E 1/2 NW 1/4, SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



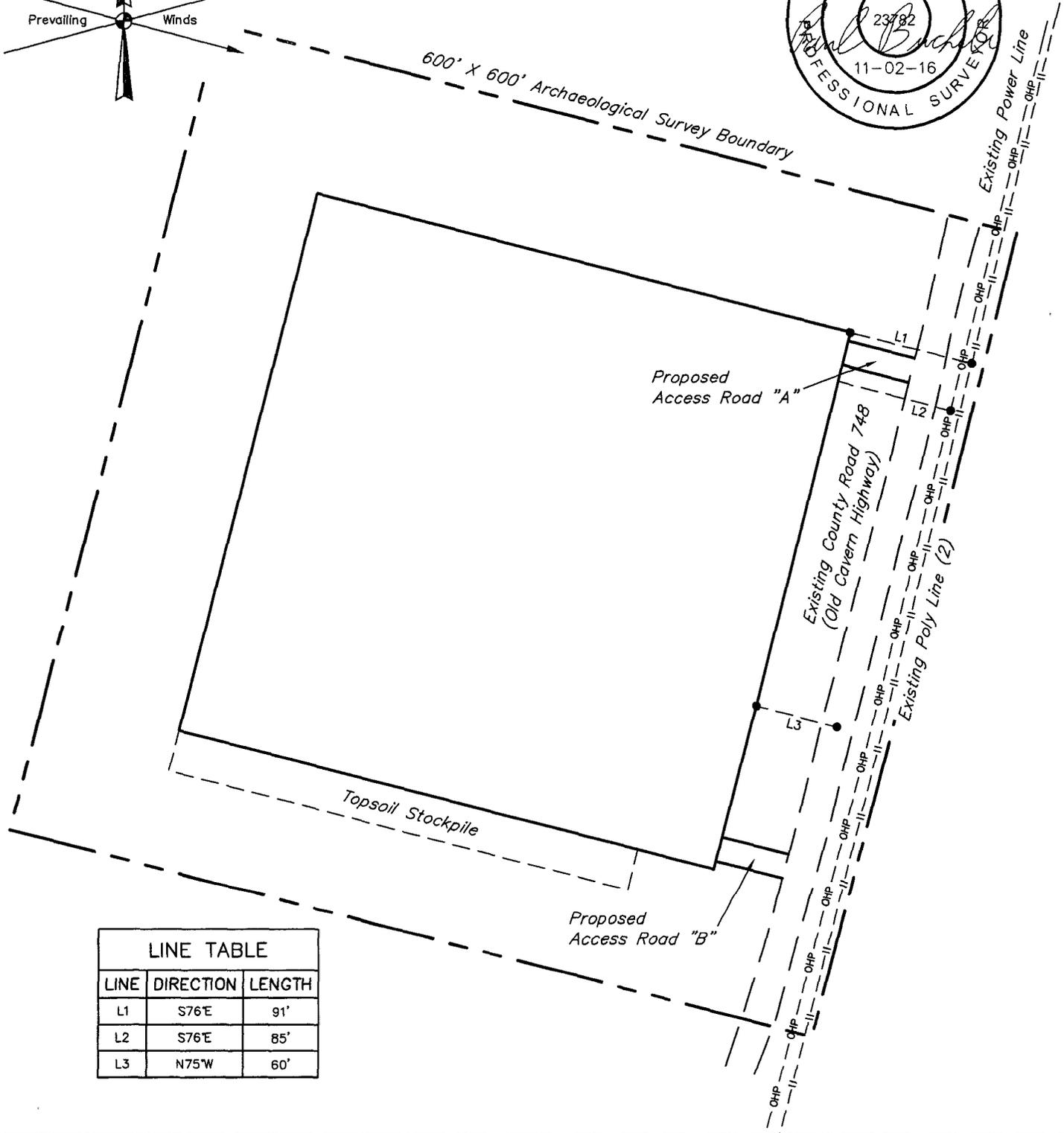
UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	AS SHOWN

TYPICAL CROSS SECTIONS EXHIBIT D



600' x 600' Archaeological Survey Boundary



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S76E	91'
L2	S76E	85'
L3	N75W	60'

NOTES:

CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
 E 1/2 NW 1/4, SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO



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 Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 100'
ARCHAEOLOGICAL SURVEY BOUNDARY			EXHIBIT D

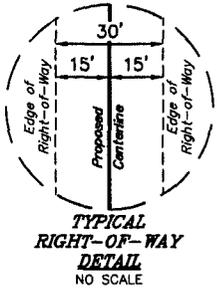
Untitled Map

Write a description for your map.

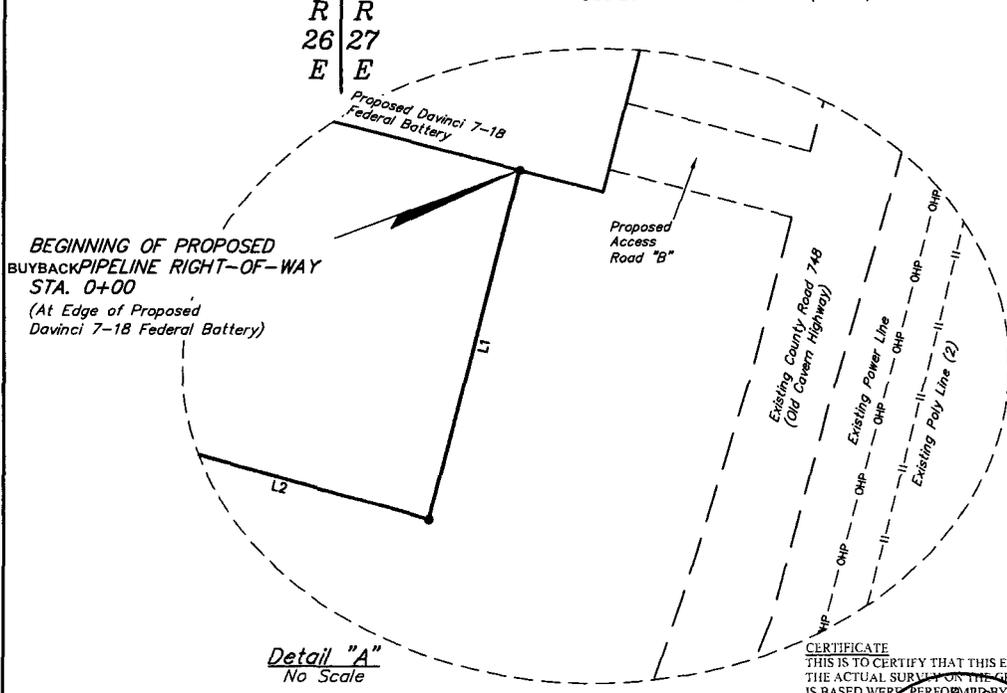
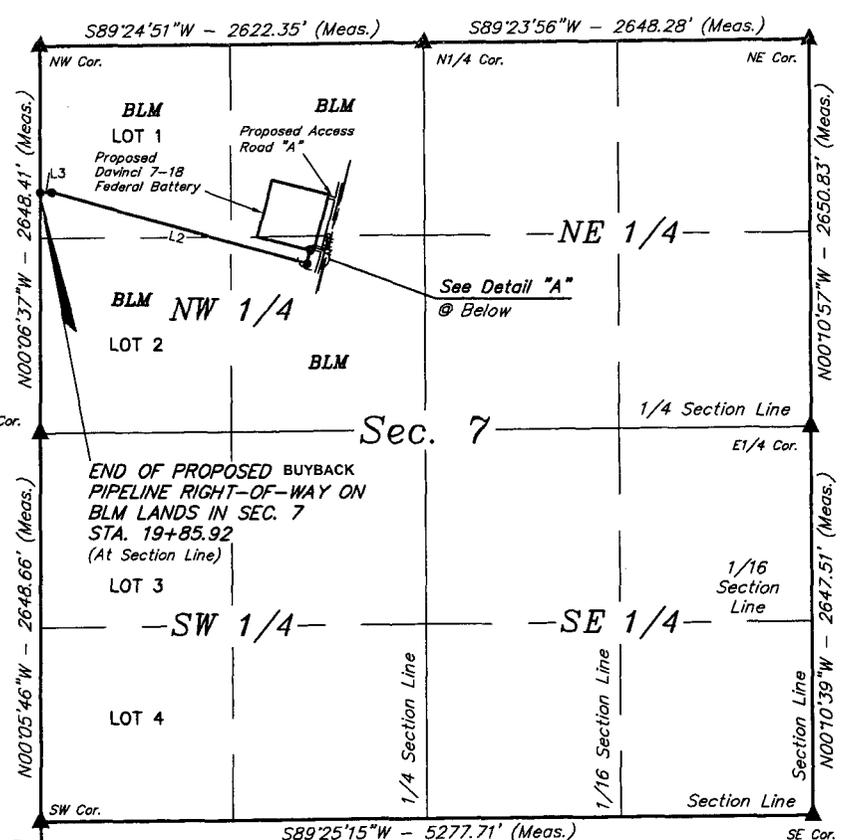


Legend

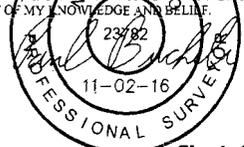
- Da Vinci 7-18 Fed Com 6H
- Pulley Road Fresh Water Station



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S14°31'19"W	94.94'
L2	N74°21'50"W	1812.38'
L3	S88°26'22"W	78.60'



CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NW 1/4)	BLM	1985.92	120.36	1.368

▲ = SECTION CORNERS LOCATED.

FILE: 61149-A1

Sheet 1 of 2

NOTES:
 • Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
 SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

BUY BACK PIPELINE R-O-W EXHIBIT G



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

BUY BACK PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT IN THE SE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S28°21'37"W 1626.42' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE S14°31'19"W 94.94'; THENCE N74°21'50"W 1812.38'; THENCE S88°26'22"W 78.60' TO A POINT ON THE WEST LINE OF LOT 1 OF SAID SECTION 7, WHICH BEARS S00°06'37"E 1009.96' FROM THE NORTHWEST CORNER OF SAID SECTION 7. 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 1.368 ACRES MORE OR LESS.

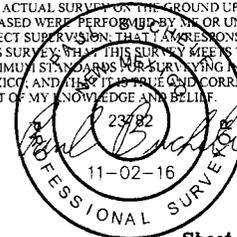
BEGINNING OF BUY BACK PIPELINE STA. 0+00
BEARS S28°21'37"W 1626.42' FROM THE NORTH
1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF BUY BACK PIPELINE ON BLM LANDS IN SEC.
7 STA. 19+85.92 BEARS S00°06'37"E 1009.96'
FROM THE NORTHWEST CORNER OF SECTION 7,
T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY BUY BACK PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL BATTERY BUY BACK PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°08'52.38"	W 104°13'55.24"
1	0+94.94	N 32°08'51.47"	W 104°13'55.51"
2	19+07.32	N 32°08'56.30"	W 104°14'15.81"
END	19+85.92	N 32°08'56.28"	W 104°14'16.73"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61149-A2

Sheet 2 of 2

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CIMAREX ENERGY CO.

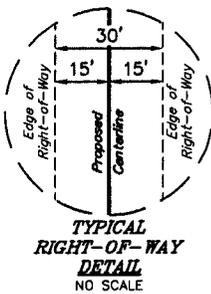
**DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**



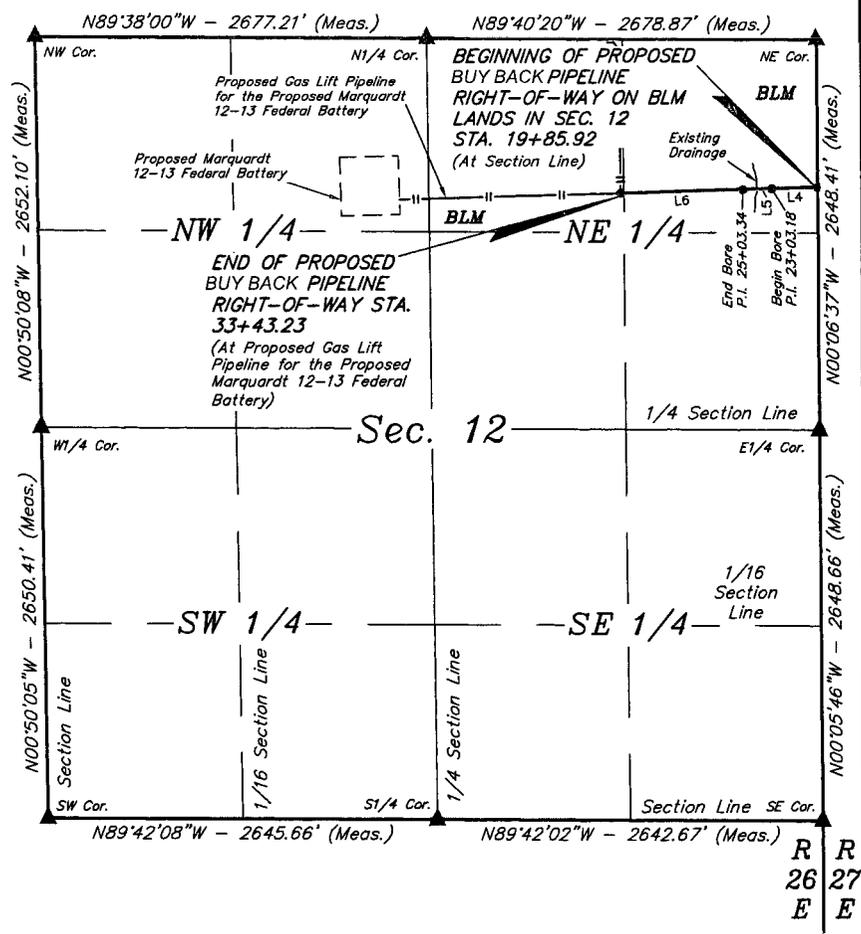
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

BUY BACK PIPELINE R-O-W EXHIBIT G



LINE TABLE		
LINE	DIRECTION	LENGTH
L4	S88°26'22"W	317.26'
L5	S88°27'30"W	200.16'
L6	S88°26'16"W	839.89'

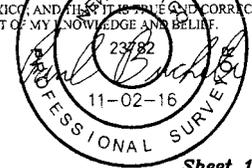


1000' 500' 0' 1000'

ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NE 1/4)	BLM	1357.31	82.26	0.935

▲ = SECTION CORNERS LOCATED.

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61149-B1 Sheet 1 of 2

NOTES:
 • Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CIMAREX ENERGY CO.
 DAVINCI 7-18 FEDERAL BATTERY
 SECTION 12, T25S, R26E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO



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

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'
BUY BACK PIPELINE R-O-W EXHIBIT G			

BUY BACK PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SECTION 12, T25S, R26E, N.M.P.M., WHICH BEARS S00°06'37"E 1009.96' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°26'22"W 317.26' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S17°11'39"W 1066.25' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°27'30"W 200.16' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S26°42'44"W 1146.33' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°26'16"W 839.89' TO A POINT IN THE NW 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S51°15'37"E 1697.40' FROM THE NORTH 1/4 CORNER OF SAID SECTION 12. 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 0.935 ACRES MORE OR LESS.

BEGINNING OF BUY BACK PIPELINE ON BLM LANDS IN SEC. 12 STA. 19+85.92 BEARS S00°06'37"E 1009.96' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

BEGIN BORE STA. 23+03.18 BEARS S17°11'39"W 1066.25' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

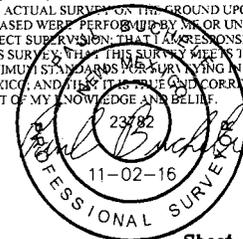
END BORE STA. 25+03.34 BEARS S26°42'44"W 1146.33' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

END OF BUY BACK PIPELINE STA. 33+43.23 BEARS S51°15'37"E 1697.40' FROM THE NORTH 1/4 CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY BUY BACK PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.59"	W 104°15'19.04"
N1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°09'06.42"	W 104°14'47.90"
NE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"
E1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"
SE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
S1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'14.00"	W 104°14'47.36"
SW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'14.13"	W 104°15'18.13"
W1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.35"	W 104°15'18.58"

DAVINCI 7-18 FEDERAL BATTERY BUY BACK PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	19+85.92	N 32°08'56.28"	W 104°14'16.73"
1	23+03.18	N 32°08'56.19"	W 104°14'20.41"
2	25+03.34	N 32°08'56.14"	W 104°14'22.74"
END	33+43.23	N 32°08'55.91"	W 104°14'32.50"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT THIS IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61149-B2

Sheet 2 of 2

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CIMAREX ENERGY CO.

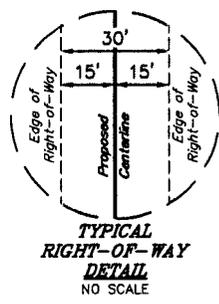
**DAVINCI 7-18 FEDERAL BATTERY
 SECTION 12, T25S, R26E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

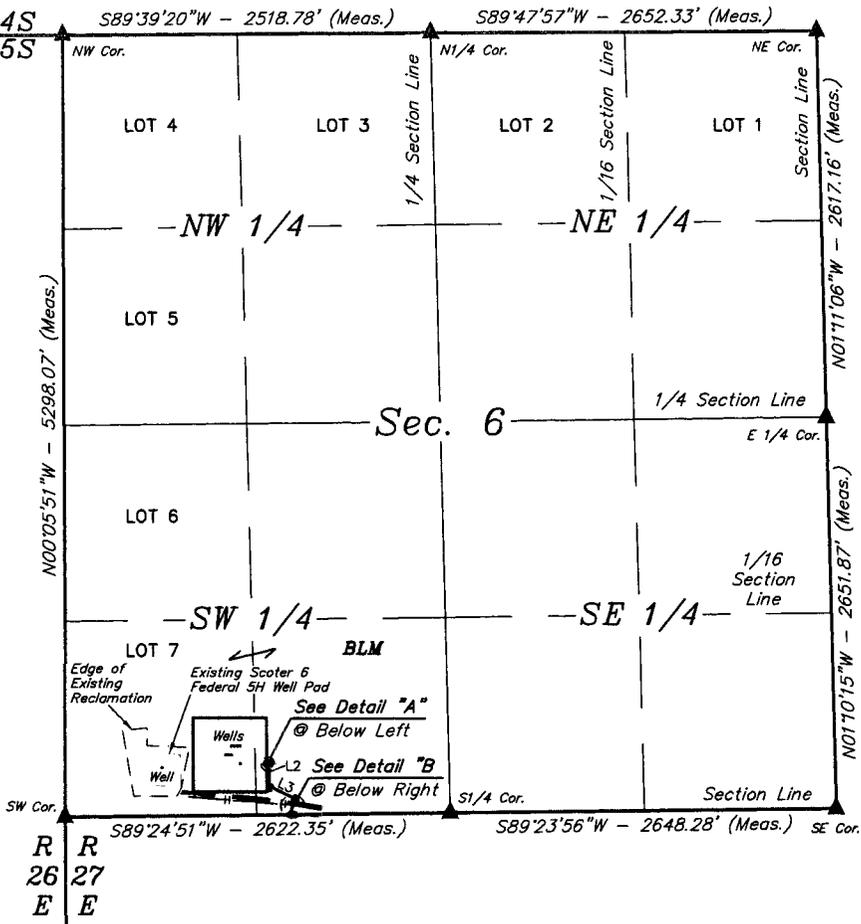
BUY BACK PIPELINE R-O-W EXHIBIT G



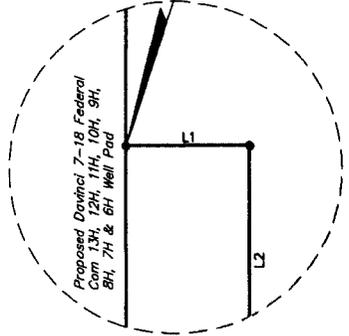
UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017



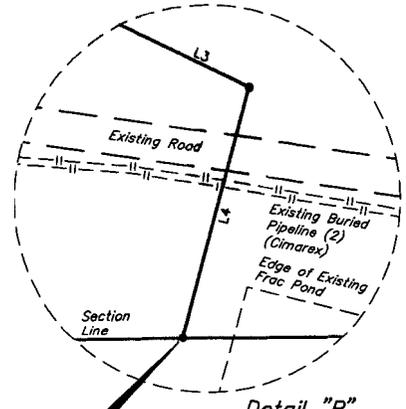
LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N89°44'41"E	20.07'
L2	S00°08'58"E	160.01'
L3	S64°18'46"E	193.25'
L4	S14°52'07"W	106.85'



BEGINNING OF PROPOSED PRODUCTION FLOW LINE RIGHT-OF-WAY STA. 0+00
 (At Edge of Proposed Davinci 7-18 Federal Corn 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H Well Pad)



Detail "A"
No Scale



Detail "B"
No Scale

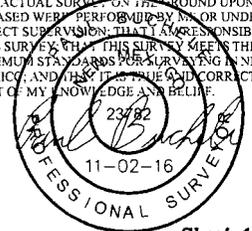
END OF PROPOSED PRODUCTION FLOW LINE RIGHT-OF-WAY ON BLM LANDS IN SEC. 6 STA. 4+80.18
 (At Section Line)



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(SW 1/4)	BLM	480.18	29.10	0.331

▲ = SECTION CORNERS LOCATED.

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61136-A1

Sheet 1 of 2

NOTES:
 • Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CIMAREX ENERGY CO.
 DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 SECTION 6, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.E.	10-24-16	1" = 1000'
PRODUCTION FLOW LINE R-O-W EXHIBIT G-1			



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

PRODUCTION FLOW LINE 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 SE 1/4 SW 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N74°59'34"W 1297.05' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE N89°44'41"E 20.07'; THENCE S00°08'58"E 160.01'; THENCE S64°18'46"E 193.25'; THENCE S14°52'07"W 106.85' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 SW 1/4 OF SAID SECTION 6, WHICH BEARS S89°24'51"W 1085.65' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. 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 0.331 ACRES MORE OR LESS.

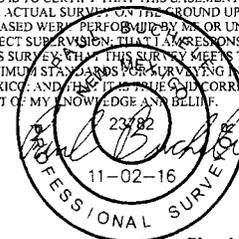
BEGINNING OF PRODUCTION FLOW LINE STA. 0+00
BEARS N74°59'34"W 1297.05' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF PRODUCTION FLOW LINE ON BLM LANDS IN SEC. 6 STA. 4+80.18 BEARS S89°24'51"W 1085.65' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H PRODUCTION FLOW LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	2.5" IRON PIPE WITH BRASS CAP	N 32°09'58.69"	W 104°14'16.85"
N1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T25S, R27E	1.5" IRON PIPE WITH BRASS CAP	N 32°09'58.93"	W 104°13'16.71"
E1/4 COR. SEC. 6, T25S, R27E	1/2" IRON PIPE WITH BRASS CAP	N 32°09'33.04"	W 104°13'16.08"
SE COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
S1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
SW COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H PRODUCTION FLOW LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°09'09.86"	W 104°14'00.82"
1	0+20.07	N 32°09'09.86"	W 104°14'00.59"
2	1+80.08	N 32°09'08.28"	W 104°14'00.58"
3	3+73.33	N 32°09'07.45"	W 104°13'58.56"
END	4+80.18	N 32°09'06.43"	W 104°13'58.88"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61136-A2

Sheet 2 of 2

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CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

PRODUCTION FLOW LINE R-O-W EXHIBIT G-1



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

PRODUCTION FLOW LINE RIGHT-OF-WAY DESCRIPTION

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

BEGINNING AT A POINT ON THE NORTH LINE OF THE NE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S89°24'51"W 1085.65' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE S14°52'07"W 515.62'; THENCE S75°24'09"E 383.89'; THENCE S14°38'47"W 380.00' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 7, WHICH BEARS S44°03'44"W 1355.24' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7. 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 0.881 ACRES MORE OR LESS.

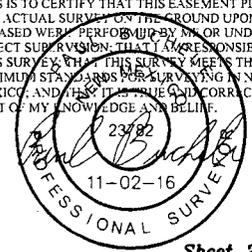
BEGINNING OF PRODUCTION FLOW LINE ON BLM LANDS IN SEC. 7 STA. 4+80.18 BEARS S89°24'51"W 1085.65' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF PRODUCTION FLOW LINE STA. 17+59.69 BEARS S44°03'44"W 1355.24' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H PRODUCTION FLOW LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H PRODUCTION FLOW LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	4+80.18	N 32°09'06.43"	W 104°13'58.88"
1	9+95.80	N 32°09'01.50"	W 104°14'00.42"
2	13+79.69	N 32°09'00.54"	W 104°13'56.10"
END	17+59.69	N 32°08'56.90"	W 104°13'57.21"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61136-B2

Sheet 2 of 2



CIMAREX ENERGY CO.

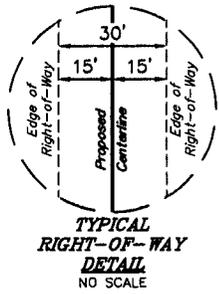
**DAVINCI 7-18 FEDERAL COM
 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
 SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

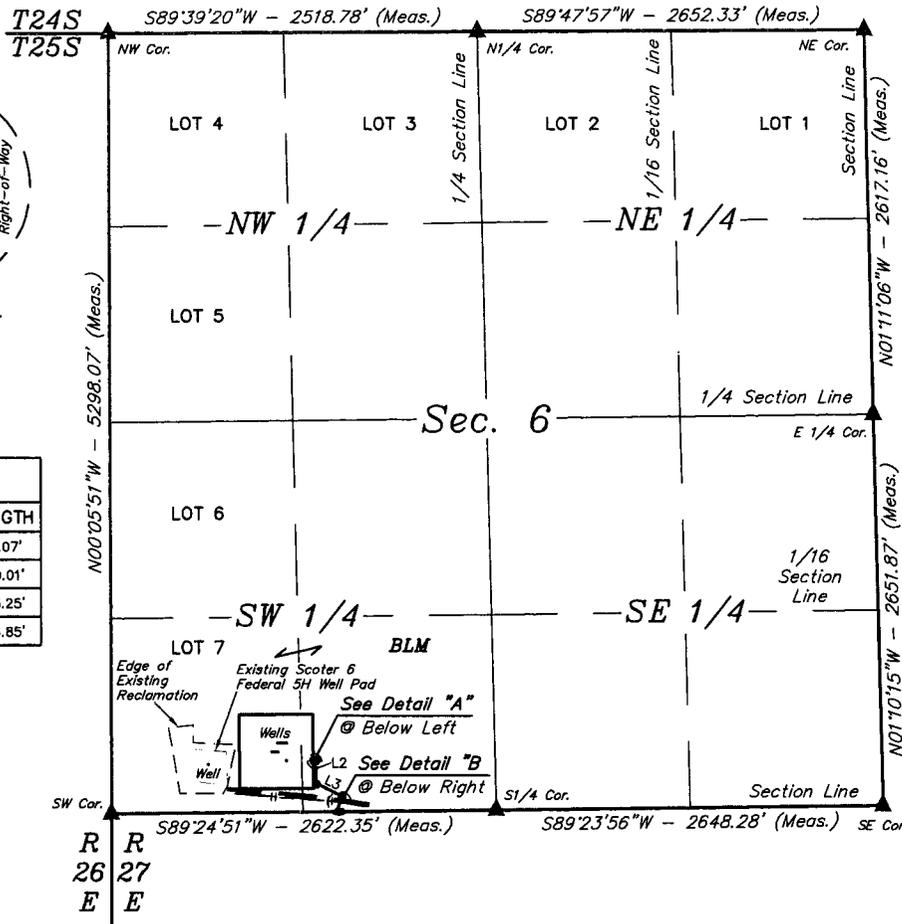
PRODUCTION FLOW LINE R-O-W EXHIBIT G-1



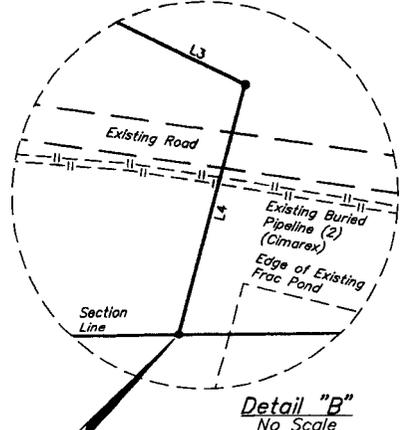
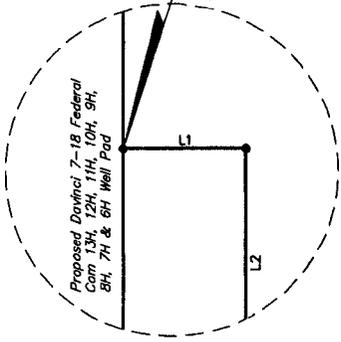
UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017



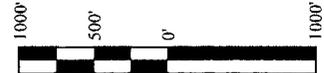
LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N89°44'41"E	20.07'
L2	S00°08'58"E	160.01'
L3	S64°18'46"E	193.25'
L4	S14°52'07"W	106.85'



**BEGINNING OF PROPOSED
GAS LIFT FLOW LINE
RIGHT-OF-WAY STA. 0+00**
 (At Edge of Proposed Davinci
7-18 Federal Com 13H, 12H, 11H,
10H, 9H, 8H, 7H & 6H Well Pad)

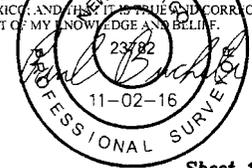


**END OF PROPOSED GAS LIFT
FLOW LINE RIGHT-OF-WAY
ON BLM LANDS IN SEC. 6
STA. 4+80.18**
 (At Section Line)



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(SW 1/4)	BLM	480.18	29.10	0.331

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



NOTES:
 • Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

FILE: 61138-A1 Sheet 1 of 2



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CIMAREX ENERGY CO.
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 1000'

GAS LIFT FLOW LINE R-O-W EXHIBIT G-1

GAS LIFT FLOW LINE 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 SE 1/4 SW 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N74°59'34"W 1297.05' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE N89°44'41"E 20.07'; THENCE S00°08'58"E 160.01'; THENCE S64°18'46"E 193.25'; THENCE S14°52'07"W 106.85' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 SW 1/4 OF SAID SECTION 6, WHICH BEARS S89°24'51"W 1085.65' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. 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 0.331 ACRES MORE OR LESS.

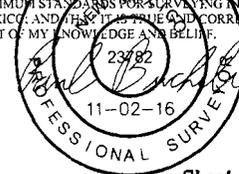
BEGINNING OF GAS LIFT FLOW LINE STA. 0+00
BEARS N74°59'34"W 1297.05' FROM THE SOUTH 1/4
CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF GAS LIFT FLOW LINE ON BLM LANDS IN
SEC. 6 STA. 4+80.18 BEARS S89°24'51"W 1085.65'
FROM THE SOUTH 1/4 CORNER OF SECTION 6,
T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H GAS LIFT FLOW LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	2.5" IRON PIPE WITH BRASS CAP	N 32°09'58.69"	W 104°14'16.85"
N1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T25S, R27E	1.5" IRON PIPE WITH BRASS CAP	N 32°09'58.93"	W 104°13'16.71"
E1/4 COR. SEC. 6, T25S, R27E	1/2" IRON PIPE WITH BRASS CAP	N 32°09'33.04"	W 104°13'16.08"
SE COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
S1/4 COR. SEC. 6, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
SW COR. SEC. 6, T25S, R27E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H GAS LIFT FLOW LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°09'09.86"	W 104°14'00.82"
1	0+20.07	N 32°09'09.86"	W 104°14'00.59"
2	1+80.08	N 32°09'08.28"	W 104°14'00.58"
3	3+73.33	N 32°09'07.45"	W 104°13'58.56"
END	4+80.18	N 32°09'06.43"	W 104°13'58.88"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND
THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT
IS BASED WERE PERFORMED BY ME OR UNDER MY
DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR
THIS SURVEY, THAT THIS SURVEY MEETS THE
MINIMUM STANDARDS FOR SURVEYING IN NEW
MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61138-A2

Sheet 2 of 2



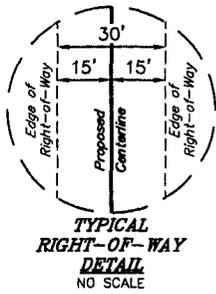
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



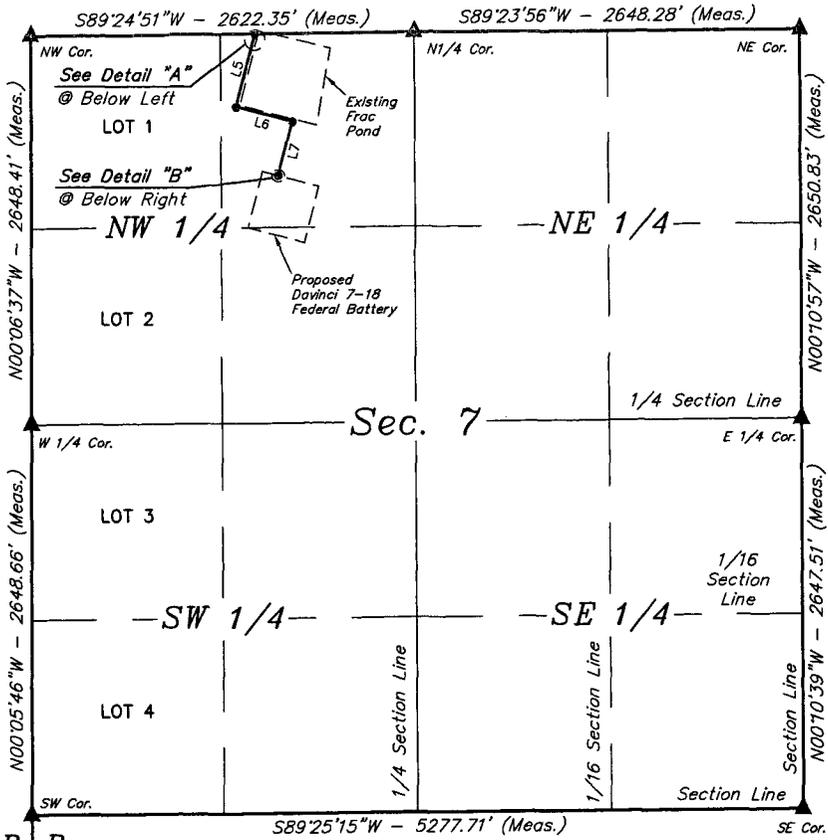
CIMAREX ENERGY CO.
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

GAS LIFT FLOW LINE R-O-W EXHIBIT G-1



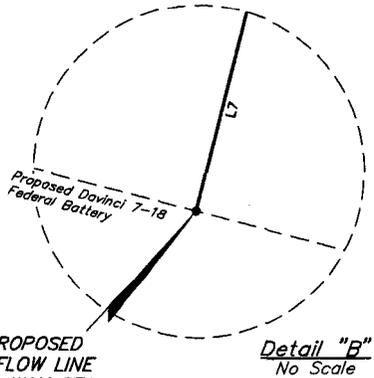
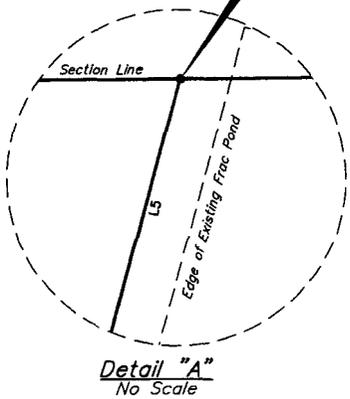
LINE TABLE		
LINE	DIRECTION	LENGTH
L5	S14°52'07"W	515.62'
L6	S75°24'08"E	398.71'
L7	S14°35'56"W	379.99'



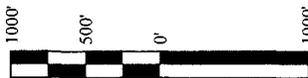
R
26
E

R
27
E

BEGINNING OF PROPOSED GAS LIFT
FLOW LINE RIGHT-OF-WAY ON BLM
LANDS IN SEC. 7 STA. 4+80.18
(At Section Line)



END OF PROPOSED
GAS LIFT FLOW LINE
RIGHT-OF-WAY STA.
17+74.50
(At Edge of Proposed Davinci
7-18 Federal Battery)



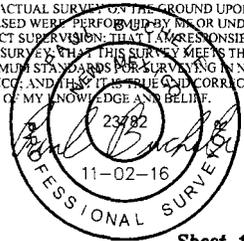
ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NW 1/4)	BLM	1294.32	78.44	0.891

▲ = SECTION CORNERS LOCATED.

NOTES:
• Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

FILE: 61138-B1 Sheet 1 of 2

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND
THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT
IS BASED WERE PERFORMED BY ME OR UNDER MY
DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR
THIS SURVEY, THAT THIS SURVEY MEETS THE
MINIMUM STANDARDS FOR SURVEYING IN NEW
MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.



UELS, LLC
Corporate Office * 85 South 200 East
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CIMAREX ENERGY CO.
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	1" = 1000'

GAS LIFT FLOW LINE R-O-W EXHIBIT G-1

GAS LIFT FLOW LINE RIGHT-OF-WAY DESCRIPTION

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

BEGINNING AT A POINT ON THE NORTH LINE OF THE NE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S89°24'51"W 1085.65' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE S14°52'07"W 515.62'; THENCE S75°24'08"E 398.71'; THENCE S14°35'56"W 379.99' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 7, WHICH BEARS S43°30'09"W 1347.85' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7. 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 0.891 ACRES MORE OR LESS.

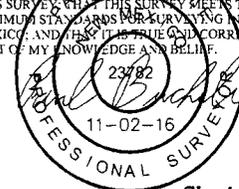
BEGINNING OF GAS LIFT FLOW LINE ON BLM
LANDS IN SEC. 7 STA. 4+80.18 BEARS
S89°24'51"W 1085.65' FROM THE NORTH 1/4
CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF GAS LIFT FLOW LINE STA. 17+74.50
BEARS S43°30'09"W 1347.85' FROM THE NORTH
1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H GAS LIFT FLOW LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL COM 13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H GAS LIFT FLOW LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	4+80.18	N 32°09'06.43"	W 104°13'58.88"
1	9+95.80	N 32°09'01.50"	W 104°14'00.42"
2	13+94.51	N 32°09'00.50"	W 104°13'55.93"
END	17+74.50	N 32°08'56.86"	W 104°13'57.04"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY OF THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION. I AM RESPONSIBLE FOR THIS SURVEY. THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO AND HAS BEEN FOUND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61138-B2

Sheet 2 of 2

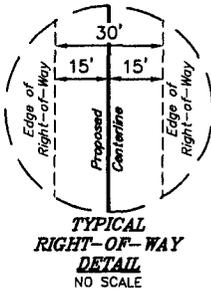


CIMAREX ENERGY CO.
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

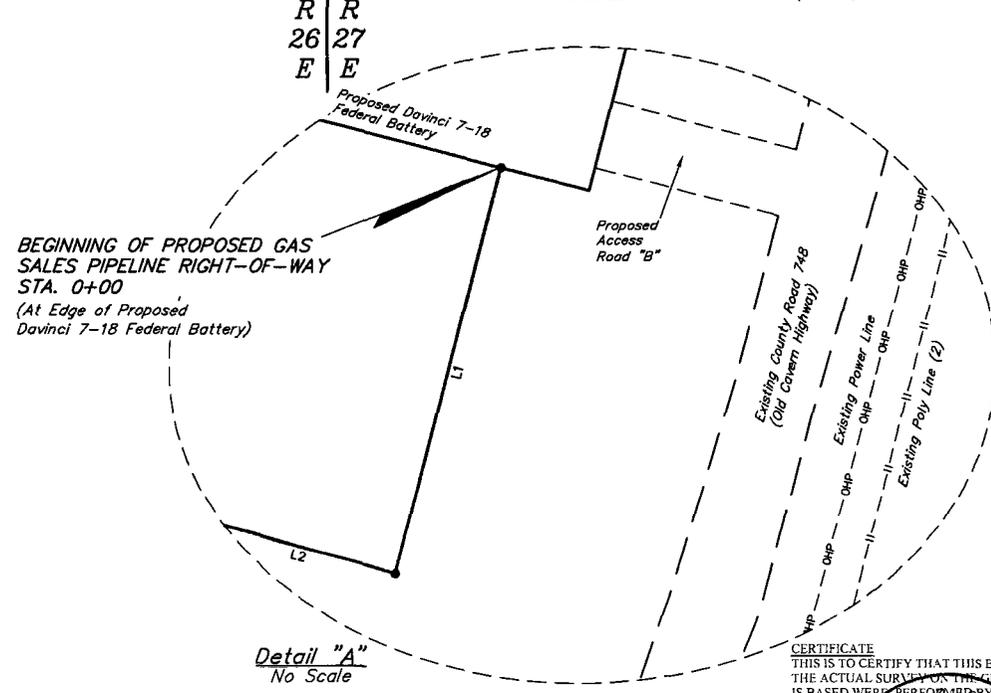
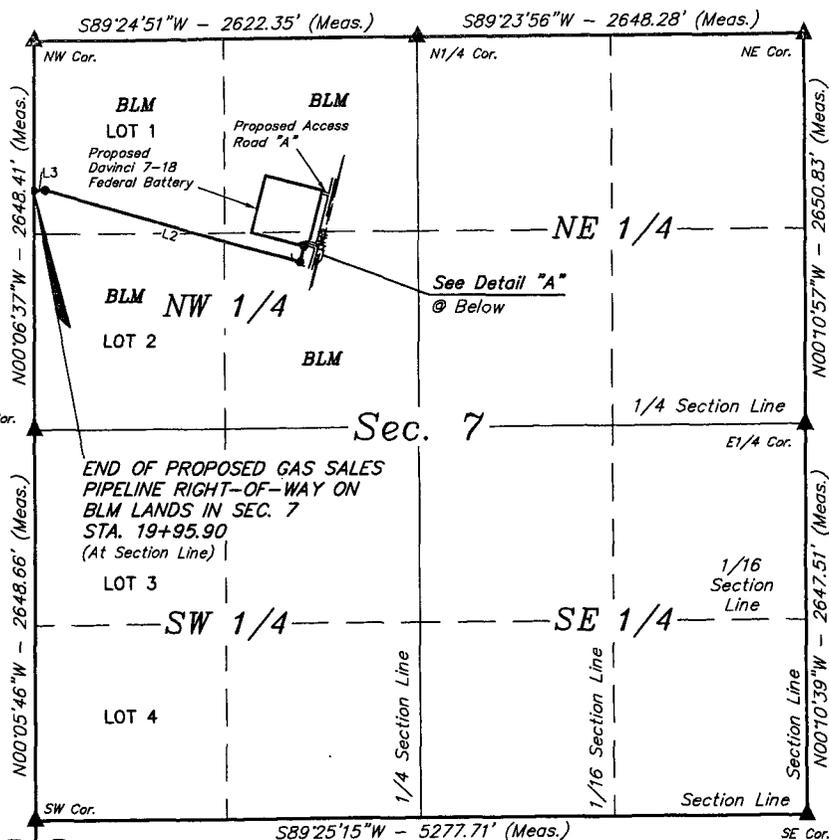
SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A
GAS LIFT FLOW LINE R-O-W EXHIBIT G-1			



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Vernal, UT 84078 * (435) 789-1017



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S14°33'54"W	110.07'
L2	N74°21'32"W	1809.62'
L3	S88°25'15"W	76.21'

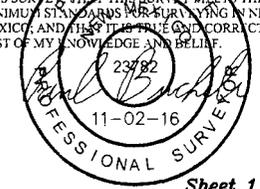


ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NW 1/4)	BLM	1995.90	120.96	1.375

▲ = SECTION CORNERS LOCATED.

NOTES:
• Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT THE SAME ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61147-A1

Sheet 1 of 2



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



CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

GAS SALES PIPELINE R-O-W EXHIBIT G

GAS SALES PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT IN THE SE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S28°24'10"W 1626.72' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE S14°33'54"W 110.07'; THENCE N74°21'32"W 1809.62'; THENCE S88°25'15"W 78.21' TO A POINT ON THE WEST LINE OF LOT 1 OF SAID SECTION 7, WHICH BEARS S00°06'37"E 1024.84' FROM THE NORTHWEST CORNER OF SAID SECTION 7. 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 1.375 ACRES MORE OR LESS.

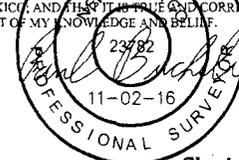
BEGINNING OF GAS SALES PIPELINE STA. 0+00
BEARS S28°24'10"W 1626.72' FROM THE NORTH
1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF GAS SALES PIPELINE ON BLM LANDS IN
SEC. 7 STA. 19+95.90 BEARS S00°06'37"E
1024.84' FROM THE NORTHWEST CORNER OF
SECTION 7, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY GAS SALES PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL BATTERY GAS SALES PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°08'52.38"	W 104°13'55.25"
1	1+10.07	N 32°08'51.33"	W 104°13'55.57"
2	19+19.69	N 32°08'56.15"	W 104°14'15.84"
END	19+95.90	N 32°08'56.13"	W 104°14'16.73"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61147-A2

Sheet 2 of 2



CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

GAS SALES PIPELINE R-O-W EXHIBIT G



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

GAS SALES PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SECTION 12, T25S, R26E, N.M.P.M., WHICH BEARS S00°06'37"E 1024.84' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°25'15"W 316.98' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S16°56'38"W 1080.47' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°27'43"W 200.06' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S26°21'43"W 1159.52' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°26'23"W 825.30' TO A POINT IN THE NW 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S51°36'53"W 1709.34' FROM THE NORTHEAST CORNER OF SAID SECTION 12. 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 0.924 ACRES MORE OR LESS.

BEGINNING OF GAS SALES PIPELINE ON BLM LANDS
IN SEC. 12 STA. 19+95.90 BEARS S00°06'37"E
1024.84' FROM THE NORTHEAST CORNER OF
SECTION 12, T25S, R26E, N.M.P.M.

BEGIN BORE STA. 23+12.88 BEARS S16°56'38"W
1080.47' FROM THE NORTHEAST CORNER OF
SECTION 12, T25S, R26E, N.M.P.M.

END BORE STA. 25+12.94 BEARS S26°21'43"W
1159.52' FROM THE NORTHEAST CORNER OF
SECTION 12, T25S, R26E, N.M.P.M.

END OF GAS SALES PIPELINE STA. 33+38.24
BEARS S51°36'53"W 1709.34' FROM THE NORTHEAST
CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY GAS SALES PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.59"	W 104°15'19.04"
N1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°09'06.42"	W 104°14'47.90"
NE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"
E1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"
SE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
S1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'14.00"	W 104°14'47.36"
SW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'14.13"	W 104°15'18.13"
W1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.35"	W 104°15'18.58"

DAVINCI 7-18 FEDERAL BATTERY GAS SALES PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	19+95.00	N 32°08'56.13"	W 104°14'16.73"
1	23+12.88	N 32°08'56.05"	W 104°14'20.41"
2	25+12.94	N 32°08'55.99"	W 104°14'22.74"
END	33+38.24	N 32°08'55.77"	W 104°14'32.33"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61147-B2

Sheet 2 of 2

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CIMAREX ENERGY CO.

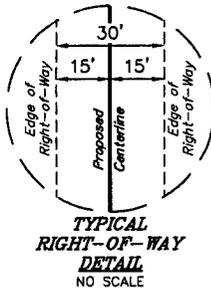
**DAVINCI 7-18 FEDERAL BATTERY
SECTION 12, T25S, R26E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

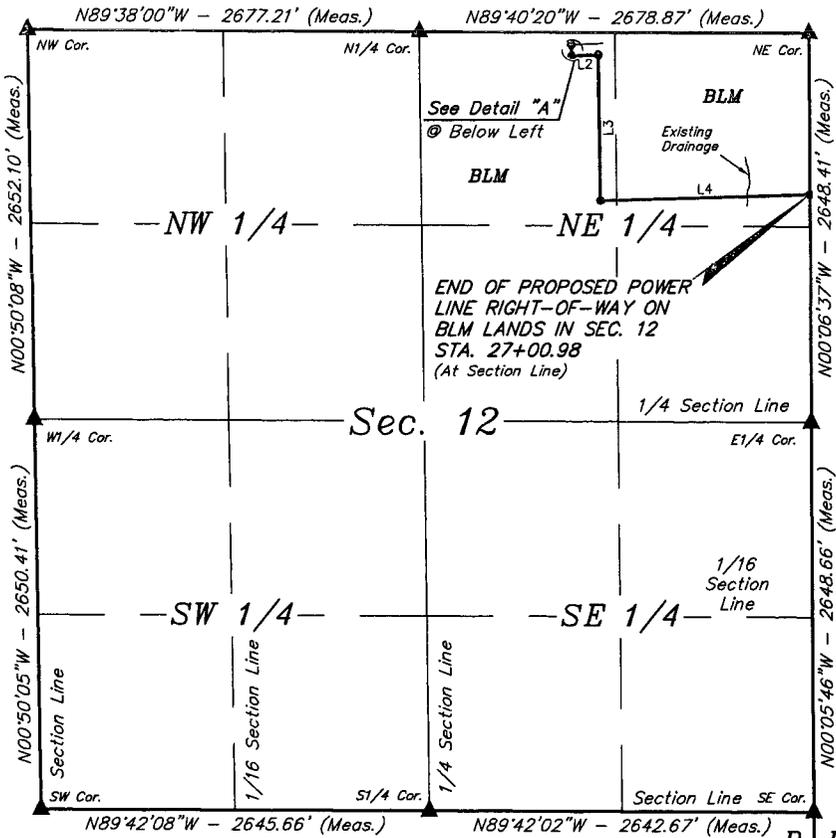
GAS SALES PIPELINE R-O-W EXHIBIT G



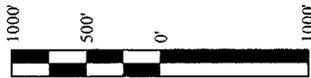
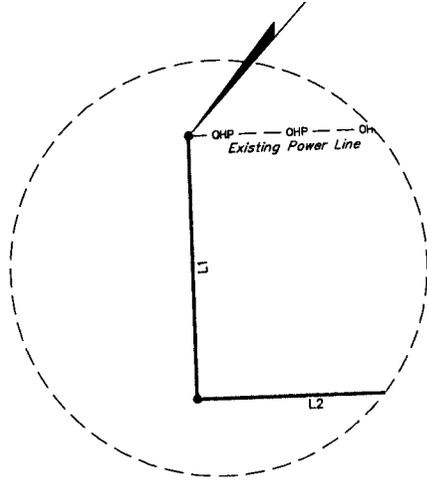
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S02°03'53"E	74.96'
L2	N87°56'12"E	184.43'
L3	S00°34'03"E	994.86'
L4	N88°26'23"E	1446.73'



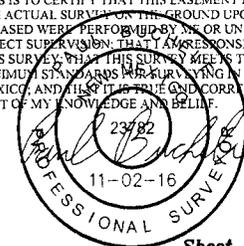
**BEGINNING OF PROPOSED
POWER LINE RIGHT-OF-WAY
STA. 0+00
(At Existing Power Line)**



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NE 1/4)	BLM	2700.98	163.70	1.860

▲ = SECTION CORNERS LOCATED.

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION THAT I AM RESPONSIBLE FOR THIS SURVEY AND THAT THIS SURVEY MEETS THE MINIMUM STANDARDS PRESCRIBED IN NEW MEXICO, AND ALSO THAT I AM A LICENSED SURVEYOR TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61155-A1

Sheet 1 of 2

NOTES:
 • Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)



CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 12, T25S, R26E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H. J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

POWER LINE R-O-W

EXHIBIT H



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

POWER LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 12, T25S, R26E, N.M.P.M., WHICH BEARS S84°57'35"E 1041.92' FROM THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S02°03'53"E 74.96'; THENCE N87°56'12"E 184.43'; THENCE S00°34'03"E 994.86'; THENCE N88°26'23"E 1446.73' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S00°06'37"E 1099.91' FROM THE NORTHEAST CORNER OF SAID SECTION 12. 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 1.860 ACRES MORE OR LESS.

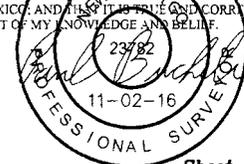
BEGINNING OF POWER LINE STA. 0+00 BEARS S84°57'35"E 1041.92' FROM THE NORTH 1/4 CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

END OF POWER LINE ON BLM LANDS IN SEC. 12 STA. 27+00.98 BEARS S00°06'37"E 1099.91' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY POWER LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.59"	W 104°15'19.04"
N1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°09'06.42"	W 104°14'47.90"
NE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"
E1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"
SE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
S1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'14.00"	W 104°14'47.36"
SW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'14.13"	W 104°15'18.13"
W1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.35"	W 104°15'18.58"

DAVINCI 7-18 FEDERAL BATTERY POWER LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°09'05.52"	W 104°14'35.83"
1	0+74.96	N 32°09'04.78"	W 104°14'35.80"
2	2+59.39	N 32°09'04.84"	W 104°14'33.66"
3	12+54.25	N 32°08'55.00"	W 104°14'33.54"
END	27+00.98	N 32°08'55.39"	W 104°14'16.72"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61155-A2

Sheet 2 of 2

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CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 12, T25S, R26E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

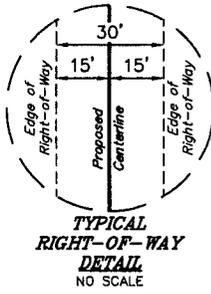
SURVEYED BY	A.H. J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

POWER LINE R-O-W

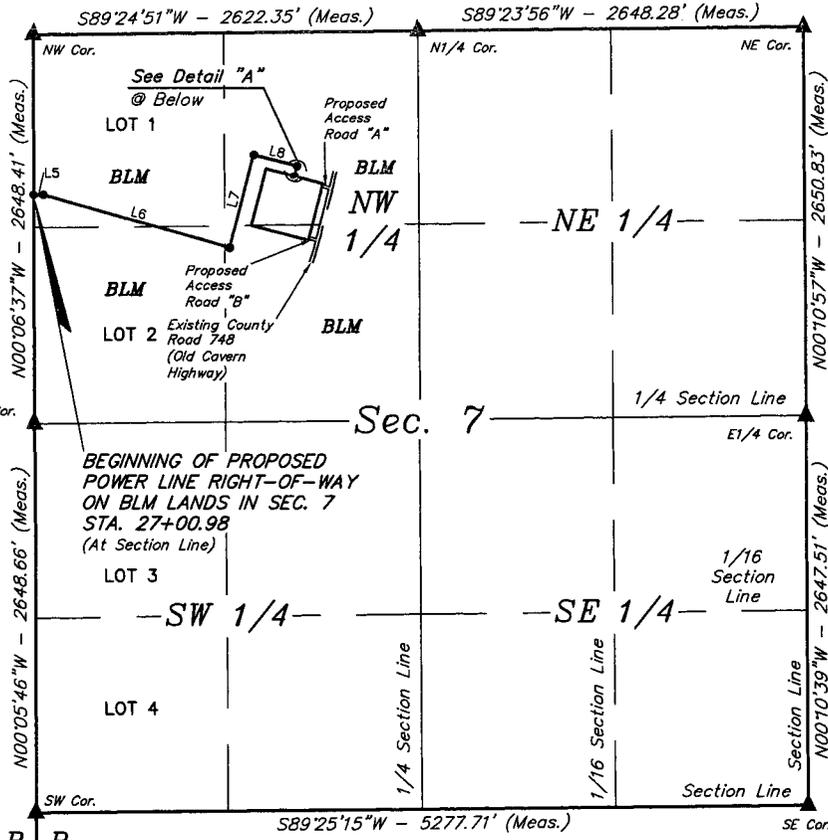
EXHIBIT H



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



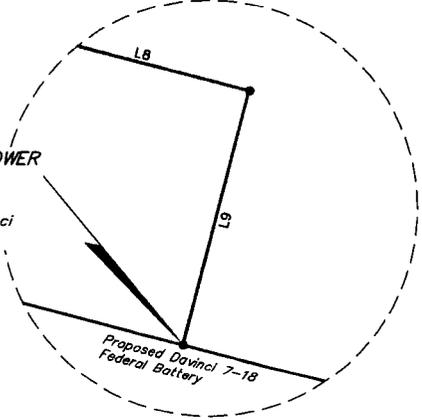
LINE TABLE		
LINE	DIRECTION	LENGTH
L5	N88°26'23"E	66.68'
L6	S74°04'20"E	1318.64'
L7	N14°32'53"E	657.62'
L8	S75°26'45"E	305.00'
L9	S14°32'47"W	74.99'



R
26
E

R
27
E

END OF PROPOSED POWER LINE RIGHT-OF-WAY
STA. 51+23.91
(At Edge of Proposed Davinci 7-18 Federal Battery)



Detail "A"
No Scale

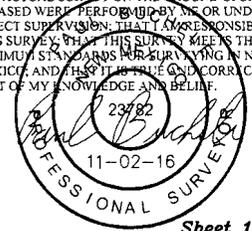


ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NW 1/4)	BLM	2422.93	146.84	1.669

▲ = SECTION CORNERS LOCATED.

NOTES:
• Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61155-B1

Sheet 1 of 2

CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

POWER LINE R-O-W EXHIBIT H



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

POWER LINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT ON THE WEST LINE OF LOT 1 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S00°06'37"E 1099.91' FROM THE NORTHWEST CORNER OF SAID SECTION 7, THENCE N88°26'23"E 66.68'; THENCE S74°04'20"E 1318.64'; THENCE N14°32'53"E 657.62'; THENCE S75°26'45"E 305.00'; THENCE S14°32'47"W 74.99' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 7, WHICH BEARS S40°10'29"W 1308.05' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7. 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 1.669 ACRES MORE OR LESS.

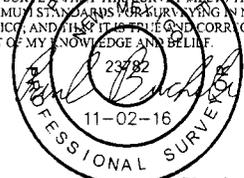
BEGINNING OF POWER LINE ON BLM LANDS IN SEC. 7,
STA. 27+00.98 BEARS S00°06'37"E 1099.91' FROM THE
NORTHWEST CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF POWER LINE STA. 51+23.91 BEARS S40°10'29"W
1308.05' FROM THE NORTH 1/4 CORNER OF SECTION 7,
T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY POWER LINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL BATTERY POWER LINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	27+00.98	N 32°08'55.39"	W 104°14'16.72"
1	27+67.66	N 32°08'55.41"	W 104°14'15.95"
2	40+86.30	N 32°08'51.83"	W 104°14'01.20"
3	47+43.92	N 32°08'58.13"	W 104°13'59.28"
4	50+48.92	N 32°08'57.37"	W 104°13'55.85"
END	51+23.91	N 32°08'56.65"	W 104°13'56.07"

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY OF THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61155-B2

Sheet 2 of 2

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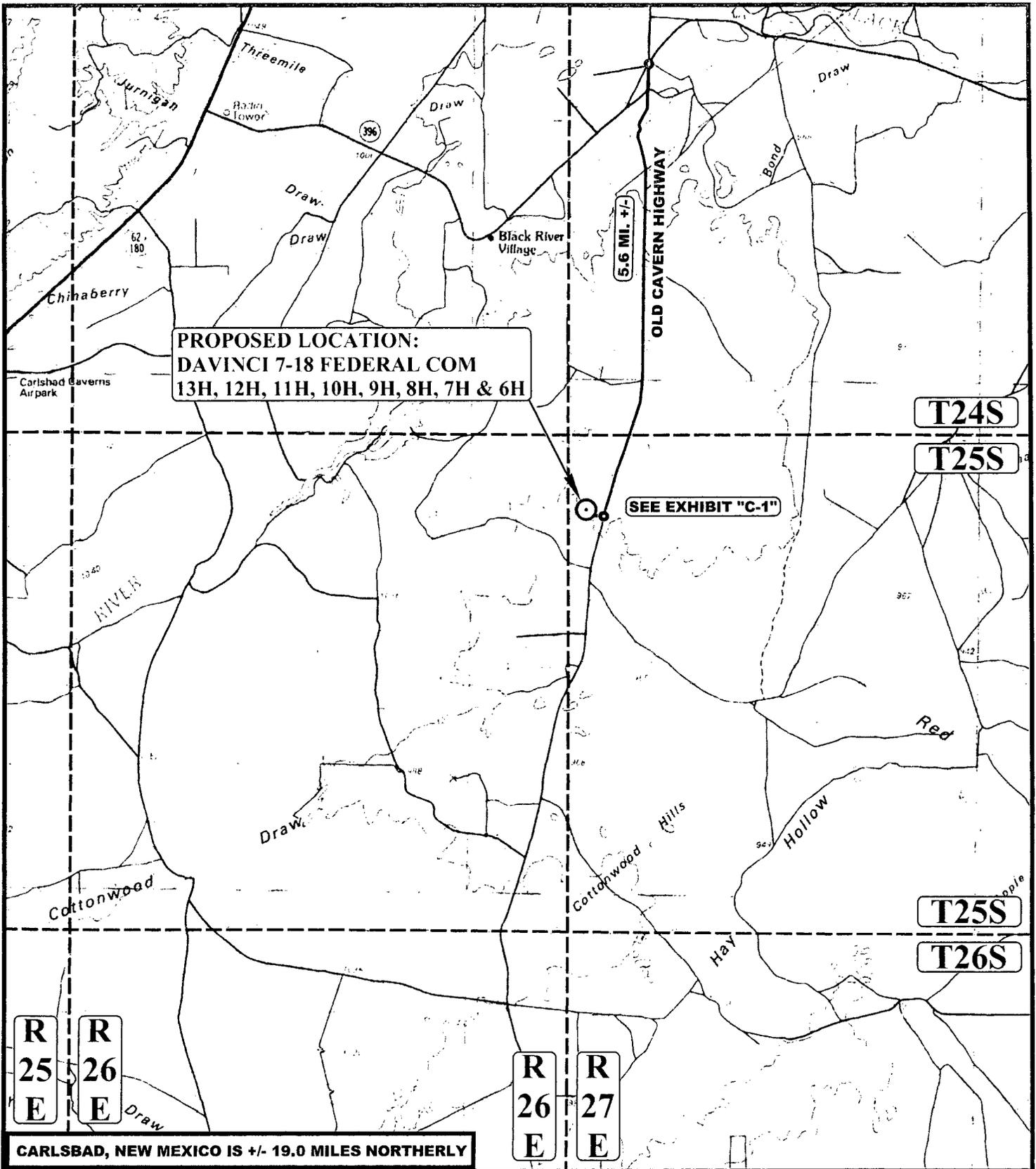
CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**



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

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A
POWER LINE R-O-W		EXHIBIT H	



**PROPOSED LOCATION:
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H**

SEE EXHIBIT "C-1"

CARLSBAD, NEW MEXICO IS +/- 19.0 MILES NORTHERLY

LEGEND:

⊙ PROPOSED LOCATION



UELS, LLC
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Vernal, UT 84078 * (435) 789-1017

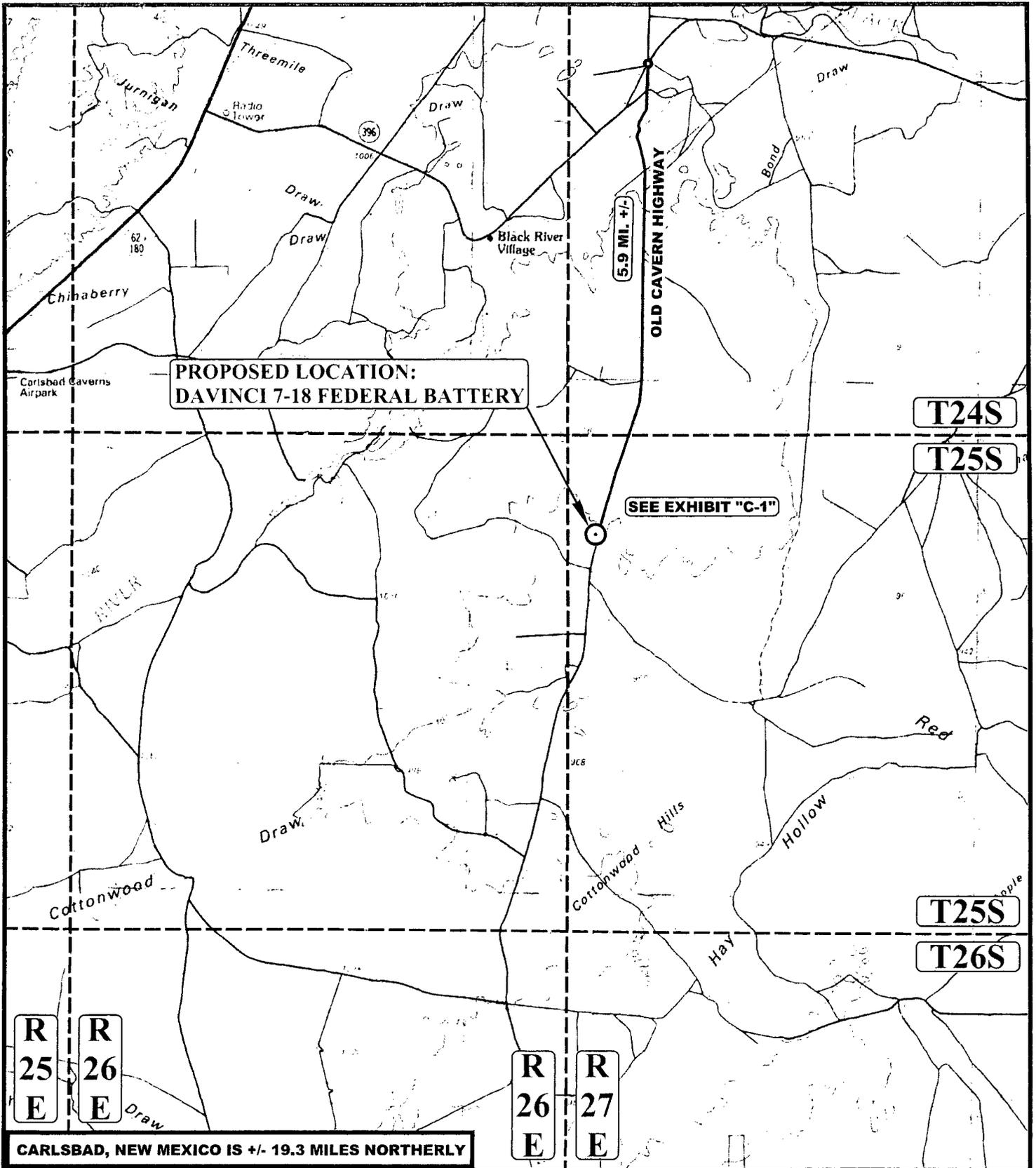


CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	T.L.	10-28-16	1 : 100,000

PUBLIC ACCESS ROAD MAP EXHIBIT B



LEGEND:

⊙ PROPOSED LOCATION



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



CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
 E 1/2 NW 1/4, SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	T.J.	10-28-16	1:100,000

PUBLIC ACCESS ROAD MAP EXHIBIT B

BEGINNING AT THE INTERSECTION OF BLACK RIVER VILLAGE ROAD AND OLD CAVERN HIGHWAY TO THE SOUTH (LOCATED IN THE SW 1/4 OF SECTION 8, T24S, R27E, N.M.P.M.), PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 5.9 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 50' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF BLACK RIVER VILLAGE ROAD AND OLD CAVERN HIGHWAY (LOCATED IN THE SW 1/4 OF SECTION 8, T24S, R27E, N.M.P.M.) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 5.9 MILES.

CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
E 1/2 NW 1/4, SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	
DRAWN BY	T.J.	10-28-16	
ROAD DESCRIPTION			



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

BEGINNING AT THE INTERSECTION OF BLACK RIVER VILLAGE ROAD AND OLD CAVERN HIGHWAY (LOCATED IN THE SW 1/4 OF SECTION 8, T24S, R27E, N.M.P.M.), PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 5.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 148' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF BLACK RIVER VILLAGE ROAD AND OLD CAVERN HIGHWAY (LOCATED IN THE SW 1/4 OF SECTION 8, T24S, R27E, N.M.P.M.) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 5.8 MILES.

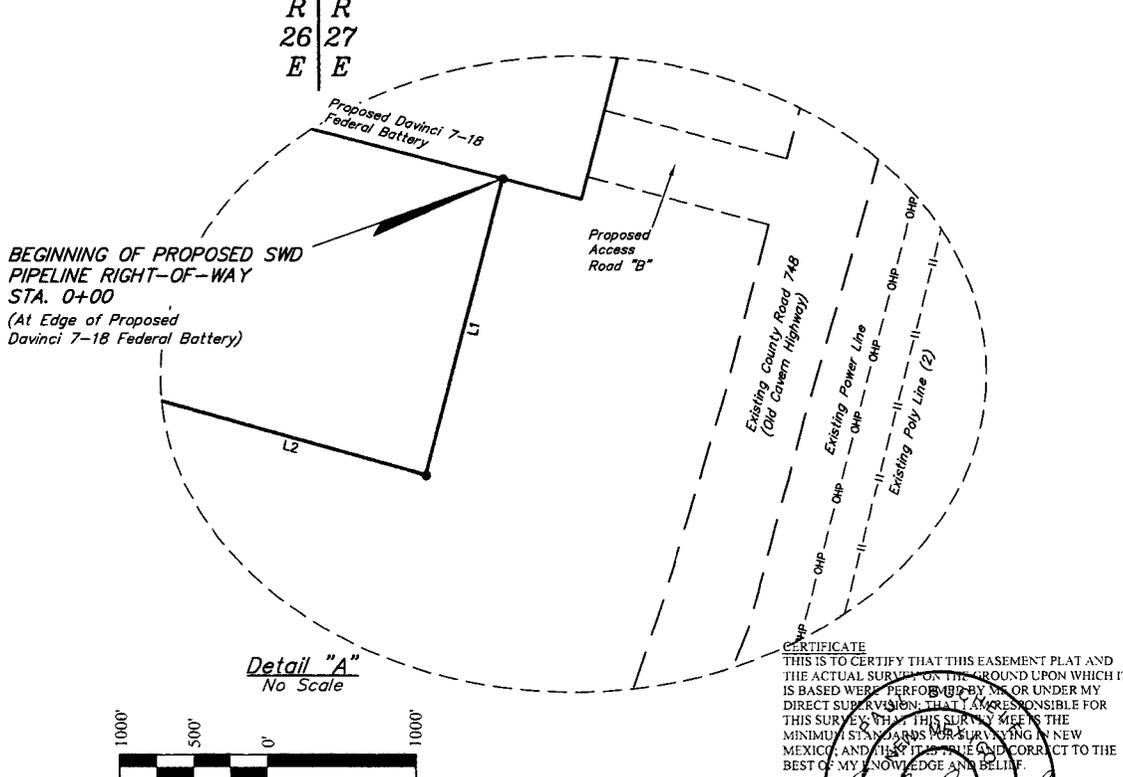
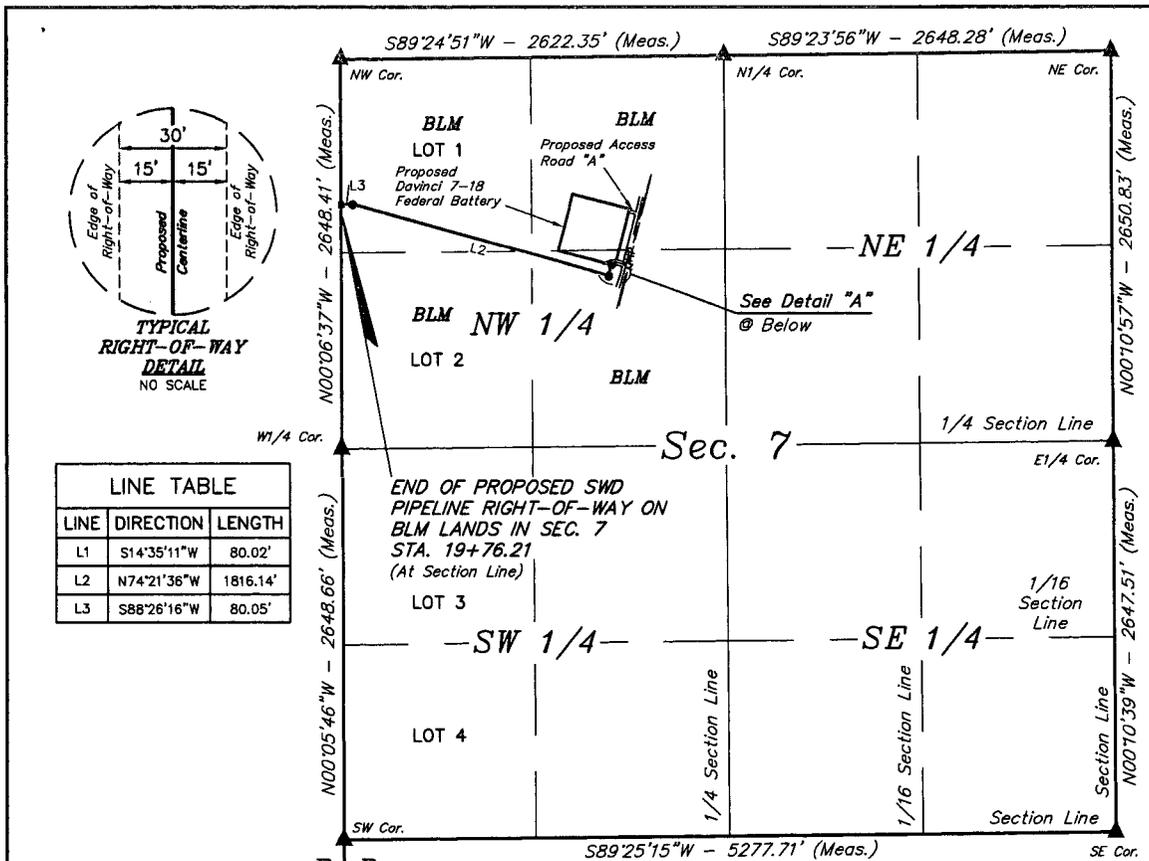
CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	
DRAWN BY	T.L.	10-28-16	
ROAD DESCRIPTION			



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



ACREAGE / LENGTH TABLE

	OWNERSHIP	FEET	RODS	ACRES
(NW 1/4)	BLM	1976.21	119.77	1.361

▲ = SECTION CORNERS LOCATED.

FILE: 61153-A1

Sheet 1 of 2

NOTES:
Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)

CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
SECTION 7, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

SWD PIPELINE R-O-W EXHIBIT I



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

SWD PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT IN THE SE 1/4 NW 1/4 OF SECTION 7, T25S, R27E, N.M.P.M., WHICH BEARS S28°18'46"W 1626.09' FROM THE NORTH 1/4 CORNER OF SAID SECTION 7, THENCE S14°35'11"W 80.02'; THENCE N74°21'36"W 1816.14'; THENCE S88°26'16"W 80.05' TO A POINT ON THE WEST LINE OF LOT 1 OF SAID SECTION 7, WHICH BEARS S00°06'37"E 994.76' FROM THE NORTHWEST CORNER OF SAID SECTION 7. 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 1.361 ACRES MORE OR LESS.

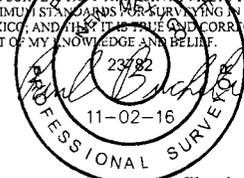
BEGINNING OF SWD PIPELINE STA. 0+00 BEARS S28°18'46"W 1626.09' FROM THE NORTH 1/4 CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

END OF SWD PIPELINE ON BLM LANDS IN SEC. 7 STA. 19+76.21 BEARS S00°06'37"E 994.76' FROM THE NORTHWEST CORNER OF SECTION 7, T25S, R27E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY SWD PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°09'06.54"	W 104°13'46.25"
NE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH BRASS CAP	N 32°08'40.58"	W 104°13'15.36"
SE COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH BRASS CAP	N 32°08'14.39"	W 104°13'15.27"
SW COR. SEC. 7, T25S, R27E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T25S, R27E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"

DAVINCI 7-18 FEDERAL BATTERY SWD PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	0+00	N 32°08'52.37"	W 104°13'55.22"
1	0+80.02	N 32°08'51.61"	W 104°13'55.46"
2	18+96.16	N 32°08'56.45"	W 104°14'15.80"
END	19+76.21	N 32°08'56.43"	W 104°14'16.73"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61153-A2

Sheet 2 of 2



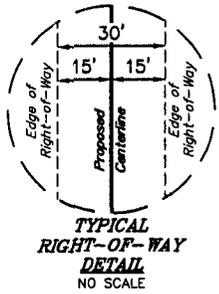
CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
 SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

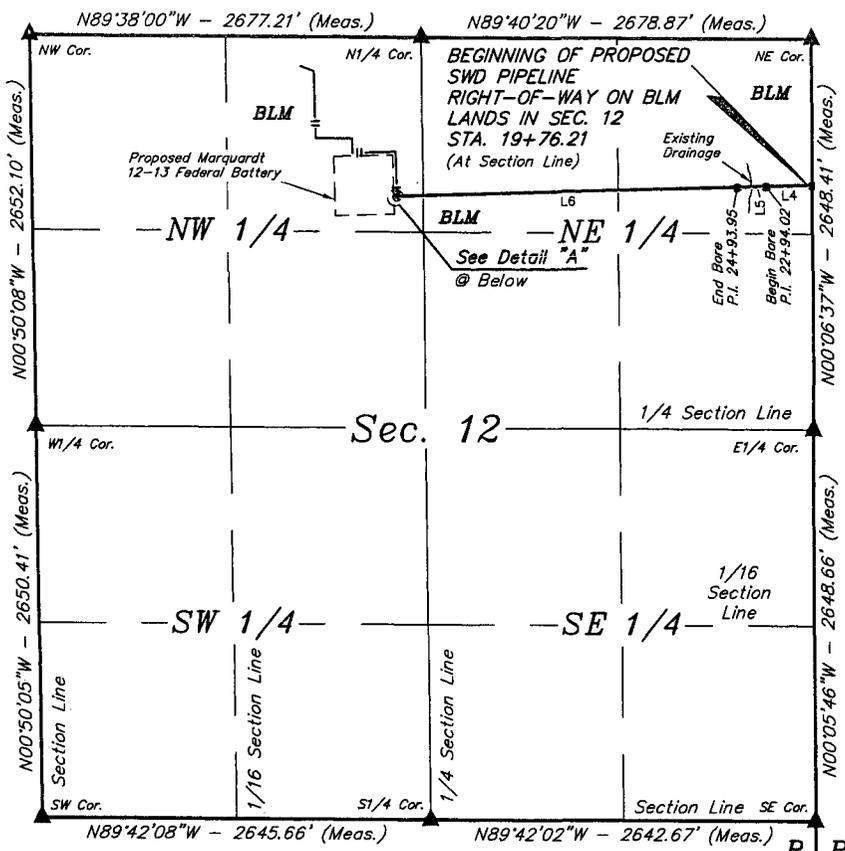
SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A
SWD PIPELINE R-O-W		EXHIBIT I	



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 Vernal, UT 84078 * (435) 789-1017

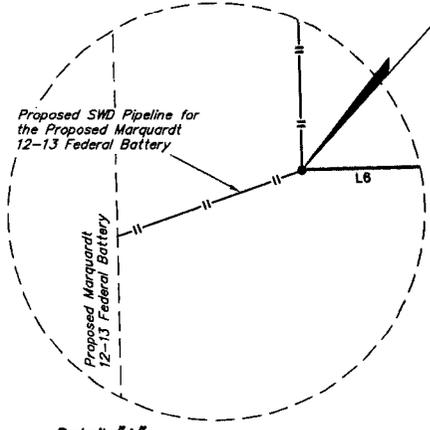


LINE TABLE		
LINE	DIRECTION	LENGTH
L4	S88°26'16"W	317.81'
L5	S88°25'08"W	199.92'
L6	S88°26'16"W	2334.08'



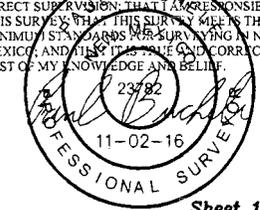
END OF PROPOSED SWD PIPELINE RIGHT-OF-WAY STA. 48+28.02
(At Proposed SWD Pipeline for the Proposed Marquardt 12-13 Federal Battery)

R R
26 27
E E



ACREAGE / LENGTH TABLE				
	OWNERSHIP	FEET	RODS	ACRES
(NE 1/4)	BLM	2672.39	161.96	1.840
(NW 1/4)	BLM	179.42	10.87	0.124
TOTAL		2851.81	172.84	1.964

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▲ = SECTION CORNERS LOCATED.

FILE: 61153-B1

Sheet 1 of 2

NOTES:
• Basis of bearing is a G.P.S. observation (Vertical Control Datum: NAVD88)



CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
SECTION 12, T25S, R26E, N.M.P.M.
EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-27-16	1" = 1000'

SWD PIPELINE R-O-W EXHIBIT I



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

SWD PIPELINE RIGHT-OF-WAY DESCRIPTION ON BLM LANDS

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

BEGINNING AT A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SECTION 12, T25S, R26E, N.M.P.M., WHICH BEARS S00°06'37"E 994.76' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°26'16"W 317.81' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S17°28'07"W 1051.94' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°25'08"W 199.92' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 12, WHICH BEARS S27°04'10"W 1133.06' FROM THE NORTHEAST CORNER OF SAID SECTION 12, THENCE S88°26'16"W 2334.08' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 12, WHICH BEARS S08°52'54"W 1101.10' FROM THE NORTH 1/4 CORNER OF SAID SECTION 12. 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 1.964 ACRES MORE OR LESS.

BEGINNING OF SWD PIPELINE ON BLM LANDS IN SEC. 12, STA. 19+76.21 BEARS S00°06'37"E 994.76' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

BEGIN BORE STA. 22+94.02 BEARS S17°28'07"W 1051.94' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

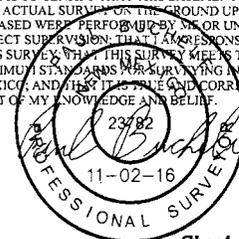
END BORE STA. 24+93.95 BEARS S27°04'10"W 1133.06' FROM THE NORTHEAST CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

END OF SWD PIPELINE STA. 48+28.02 BEARS S08°52'54"W 1101.10' FROM THE NORTH 1/4 CORNER OF SECTION 12, T25S, R26E, N.M.P.M.

DAVINCI 7-18 FEDERAL BATTERY SWD PIPELINE R-O-W			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.59"	W 104°15'19.04"
N1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°09'06.42"	W 104°14'47.90"
NE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°09'06.27"	W 104°14'16.75"
E1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.07"	W 104°14'16.69"
SE COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'13.86"	W 104°14'16.64"
S1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'14.00"	W 104°14'47.36"
SW COR. SEC. 12, T25S, R26E	2" IRON PIPE WITH CAP	N 32°08'14.13"	W 104°15'18.13"
W1/4 COR. SEC. 12, T25S, R26E	1" IRON PIPE WITH CAP	N 32°08'40.35"	W 104°15'18.58"

DAVINCI 7-18 FEDERAL BATTERY SWD PIPELINE R-O-W			
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	19+76.21	N 32°08'56.43"	W 104°14'16.73"
1	22+94.02	N 32°08'56.34"	W 104°14'20.42"
2	24+93.95	N 32°08'56.29"	W 104°14'22.74"
END	48+28.02	N 32°08'55.66"	W 104°14'49.88"

CERTIFICATE
 THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION THAT I AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



FILE: 61153-B2

Sheet 2 of 2



CIMAREX ENERGY CO.

**DAVINCI 7-18 FEDERAL BATTERY
 SECTION 12, T25S, R26E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO**

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	S.F.	10-24-16	N/A

SWD PIPELINE R-O-W EXHIBIT I



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

T25S 3355T

PROPOSED LOCATION:
DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H

EDGE OF EXISTING RECLAMATION

SEE DETAIL "A"

SCOTER 6 FEDERAL 5H

0.2 MI. +/-

PROPOSED ROAD RE-ROUTE 375'

PROPOSED PRODUCTION FLOW LINE

PROPOSED GAS LIFT FLOW LINE

TIE-IN POINT

TIE-IN POINT

DAVINCI 7-18 FEDERAL BATTERY

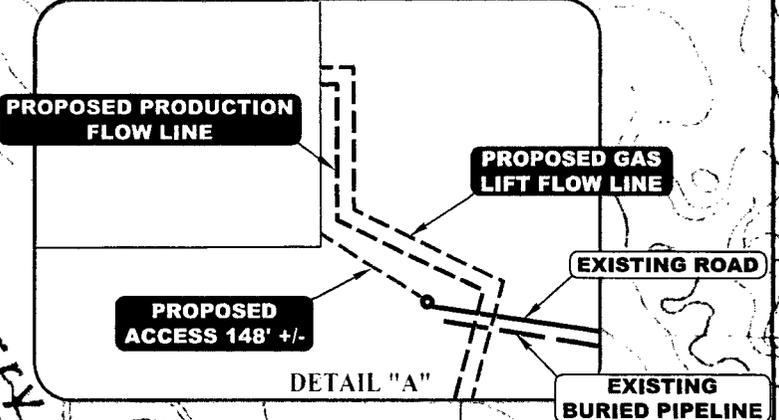
CCC Tank No 2

Hackberry

R 26
E

R 27
E

LEGEND:
—— EXISTING ROAD
- - - - PROPOSED ROAD



APPROXIMATE TOTAL PRODUCTION FLOW LINE DISTANCE = 1,760' +/-

APPROXIMATE TOTAL GAS LIFT FLOW LINE DISTANCE = 1,775' +/-

NOTE: 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 AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:
- - - - PROPOSED GAS LIFT FLOW LINE
- - - - PROPOSED PRODUCTION FLOW LINE
- - - - EXISTING BURIED PIPELINE



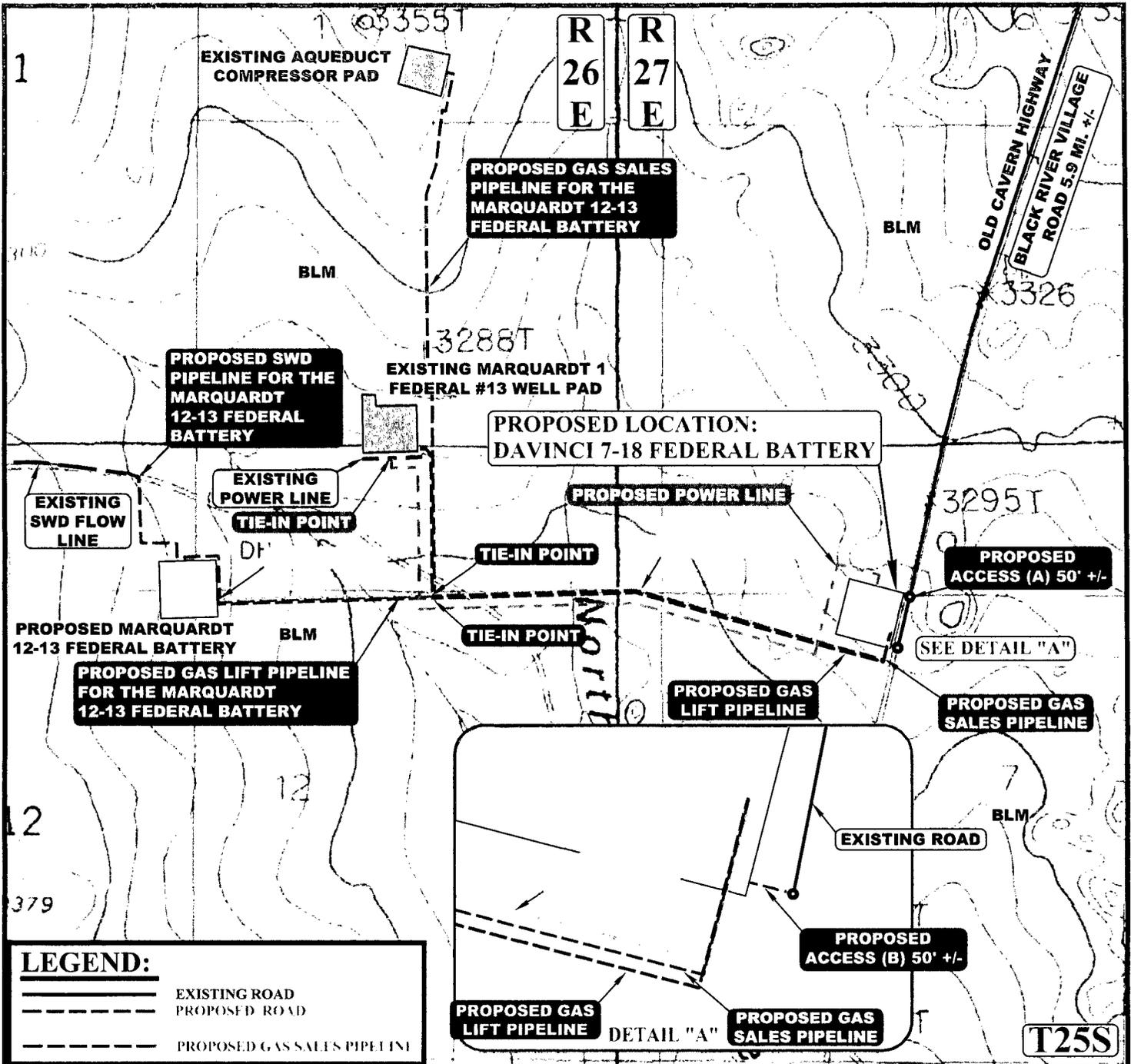
CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL COM
13H, 12H, 11H, 10H, 9H, 8H, 7H & 6H
LOT 7, SECTION 6, T25S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



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

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	T.L.	10-28-16	1 : 12,000
TOPOGRAPHIC MAP		EXHIBIT C-1	



APPROXIMATE TOTAL POWER LINE DISTANCE = 5,124' +/-

APPROXIMATE TOTAL GAS SALES PIPELINE DISTANCE = 3,338' +/-

APPROXIMATE TOTAL GAS LIFT PIPELINE DISTANCE = 3,343' +/-

NOTE: 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 AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- PROPOSED GAS LIFT PIPELINE
- EXISTING SWD FLOW LINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)
- PROPOSED POWER LINE
- EXISTING POWER LINE



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 Vernal, UT 84078 * (435) 789-1017



CIMAREX ENERGY CO.

DAVINCI 7-18 FEDERAL BATTERY
 E 1/2 NW 1/4, SECTION 7, T25S, R27E, N.M.P.M.
 EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H., J.F.	10-17-16	SCALE
DRAWN BY	T.I.	10-28-16	1 : 12,000

TOPOGRAPHIC MAP

EXHIBIT C-1

Davinci 7-18 Fed Com 6H

Casing Assumptions

Casing Program:

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	Condition	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	450	450	17 1/2	13-3/8"	43.00	H-40/J-55	ST&C	New	201	8.6	3.68		8.60	21.600	18.764	17.16
							Hybrid										
Intermediate	0	1990	1990	12 1/4	9-5/8"	36.00	J-55	LT&C	New	1055	10.2		1.91	3.33	71.640	60.484	7.49
Production	0	8981	8981	8 3/4	7"	26.00	L-80	LT&C	New	4296	9.2	1.26		1.69	251.420	216.106	2.36
Production	8981	10590	9670	8 3/4	7"	26.00	L-80	BT&C	New	4626	9.2	1.17		1.57	17.914	15.398	39.23
Completion System	8981	19500	9670	6	4-1/2"	11.60	P-110	BT&C	New	6034	12.0	1.26		1.77	7.992	6.528	56.22

Application to Drill
Davinci 7-18 Federal Com #6H

Cimarex Energy Co.
 UL: D, Sec. 6, 25S, 27E
 Eddy Co., N/A

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

1. **Location:** SHL 330' FSL & 1190' FEL, LOT 7, Sec 6 25S 27E
 BHL 330' FSL & 250' West, Lot 4, Sec 18 25S 27E
2. **Elevation Above Sea Level:** 3,281' 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:** 20,609 MD 9,750 TVD Pilot Hole TD: N/A
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Salado (Top Salt)	1200	N/A
Castille (Base Salt)	1735	N/A
Bell canyon	2010	Hydrocarbons
Cherry Canyon	2850	Hydrocarbons
Brushy Canyon	3930	Hydrocarbons
Bone Spring	5450	Hydrocarbons
1st Bone Spring SS	6380	Hydrocarbons
2nd Bone Spring LS	6650	N/A
2nd Bone Spring SS	6930	Hydrocarbons
3rd BS Limestone	7310	Hydrocarbons
3rd Bone Spring SS	8230	Hydrocarbons
Wolfcamp	8500	Hydrocarbons
Wolfcamp B	9140	Hydrocarbons
Wolfcamp C	9340	Hydrocarbons
Wolfcamp D	9390	Hydrocarbons
Wolfcamp Lower	9760	Hydrocarbons

7. **Possible Mineral Bearing Formation:** Shown above

7A. **OSE Ground Water Estimated Depth:** 0'

8. **Casing Program:**

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	Condition	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	450	450	17 1/2	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	New	201	8.6	3.68		8.60	21,600	18,764	17.16
Intermediate	0	1990	1990	12 1/4	9-5/8"	36.00	J-55	LT&C	New	1055	10.2		1.91	3.33	71,640	60,484	7.49
Production	0	8981	8981	8 3/4	7"	32.00	L-80	LT&C	New	4296	9.2	2.00		2.11	305,152	262,291	2.56
Production	8981	9738	9536	8 3/4	7"	32.00	L-80	BT&C	New	4562	9.2	1.89		1.85	17,760	15,265	48.80
Completion System	8981	20609	9750	6	4-1/2"	11.60	P-110	BT&C	New	6337	12.5	1.20		1.69	8,920	7,218	50.84

Application to Drill
Davinci 7-18 Federal Com #6H
 Cimarex Energy Co.
 UL: D, Sec. 6, 25S, 27E
 Eddy Co., N/A

8A. Casing Design and Casing Loading Assumptions:

Surface	Tension	A 1.8 design factor with effects of buoyancy: 8.60 ppg.
	Collapse	A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.60 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: 10.20 ppg.
	Collapse	A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.20 ppg mud gradient. During the running of the casing, the operator will stop and fill the casing as need to ensure it does not collapse.
	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: 9.20 ppg.
	Collapse	A 1.125 design factor with full internal evacuation of next casing string with a collapse force equal to a 9.20 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.

Note: The liner SFt is calculated for the worse case scenario of running in the hole. 4 1/2" completion system will be ran in the hole and cemented from the 4 1/2" shoe up to previous 7" casing shoe with a 10% OH Excess. A liner hanger with an isolation packer or HES versaset liner hanger will be set at the top of the 4 1/2" completion system close to the KOP. The length of liner overlap is to help with the fracture treatment efficiency during the pumping down of guns/plugs.

9. Cementing Program:

Casing Type	Type	Sacks	Yield	Weight	Cubic Feet	Cement Blend
Surface	Lead	91	1.72	13.50	156	Class C + Bentonite, 9.150 gps water
	Tail	195	1.34	14.80	260	Class C + LCM, 6.320 gps water
	TOC: 0		33% Excess		Centralizers per Onshore Order 2.III.B.1f	
Intermediate	Lead	376	1.88	12.90	706	35:65 (Poz:C) + Salt + Bentonite, 9.650 gps water
	Tail	116	1.34	14.80	155	Class C + LCM, 6.320 gps water
	TOC: 0		44% Excess			
Production	Lead	574	2.35	10.80	1347	Tuned Light I Class H, 9.600 gps water
	Tail	97	1.30	14.20	126	50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS, 5.860 gps water
	TOC: 1790		24% Excess		No centralizers planned in the lateral section. Every other joint from EOC to KOP. 1 every 4th joint from KOP to 500' inside previous casing.	
Completion System	Tail	730	1.30	14.20	948	50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS, 5.860 gps water
TOC: 10590		10% Excess		No centralizers planned in the lateral section.		

Cement volumes will be adjusted depending on hole size

9a. Proposed Drilling Plan:

Pilot Hole TD: No Pilot KOP: 8,981' EOC: 10,590'

Set Surface and Intermediate casing strings. Drill production hole to KOP. Continue drilling lateral through the curve to TD. Run prod casing & cement.

Application to Drill
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
UL: D, Sec. 6, 25S, 27E
Eddy Co., N/A

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. Below the Production Casing, a 5M 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. On the production casing, pressure tests will be made to 250 psi low and 5000 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, and 250 low and 2500 high on the production casing.

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.

11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 450'	8.10 - 8.60	28	NC	FW Spud Mud
450' to 1990'	9.70 - 10.20	30-32	NC	Brine Water
1990' to 9738'	8.70 - 9.20	30-32	NC	FW/Cut Brine
10590' to 20609'	12.00 - 12.50	50-70	5-15	Oil Based Mud

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 1990 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 H₂S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H₂S Safety package on all wells, attached is an "H₂S 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: 4562 psi

Estimated BHT: 158°

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.

Application to Drill
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
UL: D, Sec. 6, 25S, 27E
Eddy Co., N/A

15. Other Facets of Operations:

If production casing is run an additional 30 days will be required to complete and construct surface facilities.

Wolfcamp pay will be perforated and stimulated.

The proposed well will be tested and potential as **Oil**

Cimarex Davinci 7-18 Federal Com #6H Rev0 RM 08Nov16 Proposal



Geodetic Report

(Non-Def Plan)

Report Date: November 08, 2016 - 10:40 AM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Davinci 7-18 Federal Com #6H / Cimarex Davinci 7-18 Federal Com #6H
Well: Cimarex Davinci 7-18 Federal Com #6H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Davinci 7-18 Federal Com #6H Rev0 RM 08Nov16
Survey Date: November 08, 2016
Tort / AHD / DDI / ERD Ratio: 160.852° / 11289.005 ft / 6.584 / 1.158
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 9.85572" W 104° 14' 2.91580"
Location Grid N/E Y/X: N 419315.440 fUS, E 572034.160 fUS
CRS Grid Convergence Angle: 0.0528°
Grid Scale Factor: 0.99991017
Version / Patch: 2.10.254.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 184.983° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3301.300 ft above MSL
Seabed / Ground Elevation: 3281.300 ft above MSL
Magnetic Declination: 7.521°
Total Gravity Field Strength: 998.4383mgm (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48096.658 nT
Magnetic Dip Angle: 59.918°
Declination Date: November 08, 2016
Magnetic Declination Model: HDGM 2016
North Reference: Grid North
Grid Convergence Used: 0.0528°
Total Corr Mag North->Grid North: 7.4678°

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (fUS)	Eastings (fUS)	Latitude (N/S °'")	Longitude (E/W °'")
Tie-In [350' FSL, 1190' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	100.00	0.00	265.00	100.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	200.00	0.00	265.00	200.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	300.00	0.00	265.00	300.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	400.00	0.00	265.00	400.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	500.00	0.00	265.00	500.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	600.00	0.00	265.00	600.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	700.00	0.00	265.00	700.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	800.00	0.00	265.00	800.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	900.00	0.00	265.00	900.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1000.00	0.00	265.00	1000.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1100.00	0.00	265.00	1100.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1200.00	0.00	265.00	1200.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1300.00	0.00	265.00	1300.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1400.00	0.00	265.00	1400.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1500.00	0.00	265.00	1500.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1600.00	0.00	265.00	1600.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1700.00	0.00	265.00	1700.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1800.00	0.00	265.00	1800.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	1900.00	0.00	265.00	1900.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	2000.00	0.00	265.00	2000.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	2100.00	0.00	265.00	2100.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	2200.00	0.00	265.00	2200.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92

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 ° ' ")
	8000.00	0.00	265.00	8000.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8100.00	0.00	265.00	8100.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8200.00	0.00	265.00	8200.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8300.00	0.00	265.00	8300.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8400.00	0.00	265.00	8400.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8500.00	0.00	265.00	8500.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8600.00	0.00	265.00	8600.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8700.00	0.00	265.00	8700.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8800.00	0.00	265.00	8800.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	8900.00	0.00	265.00	8900.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
KOP - Build 10°/100' DLS	8981.00	0.00	265.00	8981.00	0.00	0.00	0.00	0.00	419315.44	572034.16	N 32 9 9.86	W 104 14 2.92
	9000.00	1.90	265.00	9000.00	0.05	-0.03	-0.31	10.00	419315.41	572033.85	N 32 9 9.86	W 104 14 2.92
	9100.00	11.90	265.00	9099.15	2.13	-1.07	-12.27	10.00	419314.37	572021.89	N 32 9 9.85	W 104 14 3.06
	9200.00	21.90	265.00	9194.71	7.17	-3.60	-41.19	10.00	419311.84	571992.97	N 32 9 9.82	W 104 14 3.39
	9300.00	31.90	265.00	9283.77	15.00	-7.54	-86.20	10.00	419307.90	571947.96	N 32 9 9.78	W 104 14 3.92
	9400.00	41.90	265.00	9363.64	25.40	-12.77	-145.94	10.00	419302.67	571886.23	N 32 9 9.73	W 104 14 4.61
	9500.00	51.90	265.00	9431.88	38.04	-19.12	-218.59	10.00	419296.32	571815.59	N 32 9 9.67	W 104 14 5.46
	9600.00	61.90	265.00	9486.42	52.54	-26.42	-301.93	10.00	419289.03	571732.25	N 32 9 9.60	W 104 14 6.43
	9700.00	71.90	265.00	9525.61	68.47	-34.42	-393.45	10.00	419281.02	571640.75	N 32 9 9.52	W 104 14 7.49
Align to Target 10°/100' DLS	9738.50	75.75	265.00	9536.33	74.88	-37.64	-430.28	10.00	419277.80	571603.92	N 32 9 9.49	W 104 14 7.92
	9800.00	75.92	258.66	9551.39	88.44	-46.12	-489.27	10.00	419269.33	571544.94	N 32 9 9.40	W 104 14 8.61
	9900.00	76.54	248.38	9575.26	123.93	-73.64	-582.26	10.00	419241.81	571451.95	N 32 9 9.13	W 104 14 9.69
	10000.00	77.57	238.18	9597.72	175.09	-117.41	-669.18	10.00	419198.04	571365.05	N 32 9 8.70	W 104 14 10.70
	10100.00	78.99	228.06	9618.08	240.36	-176.11	-747.37	10.00	419139.35	571286.86	N 32 9 8.12	W 104 14 11.61
	10200.00	80.73	218.06	9635.73	317.75	-247.94	-814.48	10.00	419067.52	571219.76	N 32 9 7.41	W 104 14 12.39
	10300.00	82.75	208.16	9650.14	404.92	-330.73	-868.44	10.00	418984.74	571165.80	N 32 9 6.59	W 104 14 13.02
	10400.00	84.98	198.36	9660.86	499.21	-421.97	-907.64	10.00	418893.51	571126.60	N 32 9 5.69	W 104 14 13.48
	10500.00	87.35	188.62	9667.56	597.76	-518.87	-930.87	10.00	418796.62	571103.37	N 32 9 4.73	W 104 14 13.75
	10589.52	89.54	179.94	9670.00	687.15	-608.02	-937.54	10.00	418707.48	571096.71	N 32 9 3.85	W 104 14 13.83
Hold	10600.00	89.54	179.94	9670.08	697.59	-618.49	-937.53	0.00	418697.00	571096.72	N 32 9 3.74	W 104 14 13.83
	10700.00	89.54	179.94	9670.88	797.20	-718.49	-937.42	0.00	418597.01	571096.83	N 32 9 2.75	W 104 14 13.83
	10800.00	89.54	179.94	9671.68	896.81	-818.49	-937.31	0.00	418497.03	571097.05	N 32 9 1.76	W 104 14 13.83
	10900.00	89.54	179.94	9672.47	996.42	-918.49	-937.20	0.00	418397.04	571097.05	N 32 9 0.78	W 104 14 13.83
	11000.00	89.54	179.94	9673.27	1096.03	-1018.48	-937.09	0.00	418297.05	571097.16	N 32 8.59	W 104 14 13.83
	11100.00	89.54	179.94	9674.07	1195.64	-1118.48	-936.98	0.00	418197.06	571097.27	N 32 8.58	W 104 14 13.83
	11200.00	89.54	179.94	9674.87	1295.25	-1218.48	-936.87	0.00	418097.08	571097.38	N 32 8.57	W 104 14 13.83
	11300.00	89.54	179.94	9675.67	1394.85	-1318.47	-936.76	0.00	417997.09	571097.49	N 32 8.56	W 104 14 13.83
	11400.00	89.54	179.94	9676.47	1494.46	-1418.47	-936.65	0.00	417897.10	571097.60	N 32 8.55	W 104 14 13.83
	11500.00	89.54	179.94	9677.27	1594.07	-1518.47	-936.54	0.00	417797.11	571097.71	N 32 8.54	W 104 14 13.83
	11600.00	89.54	179.94	9678.06	1693.68	-1618.46	-936.43	0.00	417697.13	571097.82	N 32 8.53	W 104 14 13.82
	11700.00	89.54	179.94	9678.86	1793.29	-1718.46	-936.32	0.00	417597.14	571097.93	N 32 8.52	W 104 14 13.82
	11800.00	89.54	179.94	9679.66	1892.90	-1818.46	-936.21	0.00	417497.15	571098.04	N 32 8.51	W 104 14 13.82
	11900.00	89.54	179.94	9680.46	1992.51	-1918.45	-936.10	0.00	417397.16	571098.15	N 32 8.50	W 104 14 13.82
	12000.00	89.54	179.94	9681.26	2092.12	-2018.45	-935.99	0.00	417297.18	571098.25	N 32 8.49	W 104 14 13.82
	12100.00	89.54	179.94	9682.06	2191.73	-2118.45	-935.88	0.00	417197.19	571098.36	N 32 8.48	W 104 14 13.82
	12200.00	89.54	179.94	9682.85	2291.34	-2218.44	-935.77	0.00	417097.20	571098.47	N 32 8.47	W 104 14 13.82
	12300.00	89.54	179.94	9683.65	2390.95	-2318.44	-935.66	0.00	416997.21	571098.58	N 32 8.46	W 104 14 13.82
	12400.00	89.54	179.94	9684.45	2490.56	-2418.44	-935.55	0.00	416897.23	571098.69	N 32 8.45	W 104 14 13.82
	12500.00	89.54	179.94	9685.25	2590.17	-2518.43	-935.44	0.00	416797.24	571098.80	N 32 8.44	W 104 14 13.82
	12600.00	89.54	179.94	9686.05	2689.78	-2618.43	-935.33	0.00	416697.25	571098.91	N 32 8.43	W 104 14 13.82
	12700.00	89.54	179.94	9686.85	2789.39	-2718.43	-935.22	0.00	416597.26	571099.02	N 32 8.42	W 104 14 13.82
	12800.00	89.54	179.94	9687.65	2888.99	-2818.42	-935.11	0.00	416497.28	571099.13	N 32 8.41	W 104 14 13.82
	12900.00	89.54	179.94	9688.44	2988.60	-2918.42	-935.00	0.00	416397.29	571099.24	N 32 8.40	W 104 14 13.82
	13000.00	89.54	179.94	9689.24	3088.21	-3018.42	-934.89	0.00	416297.30	571099.35	N 32 8.40	W 104 14 13.82
	13100.00	89.54	179.94	9690.04	3187.82	-3118.41	-934.78	0.00	416197.31	571099.46	N 32 8.39	W 104 14 13.82

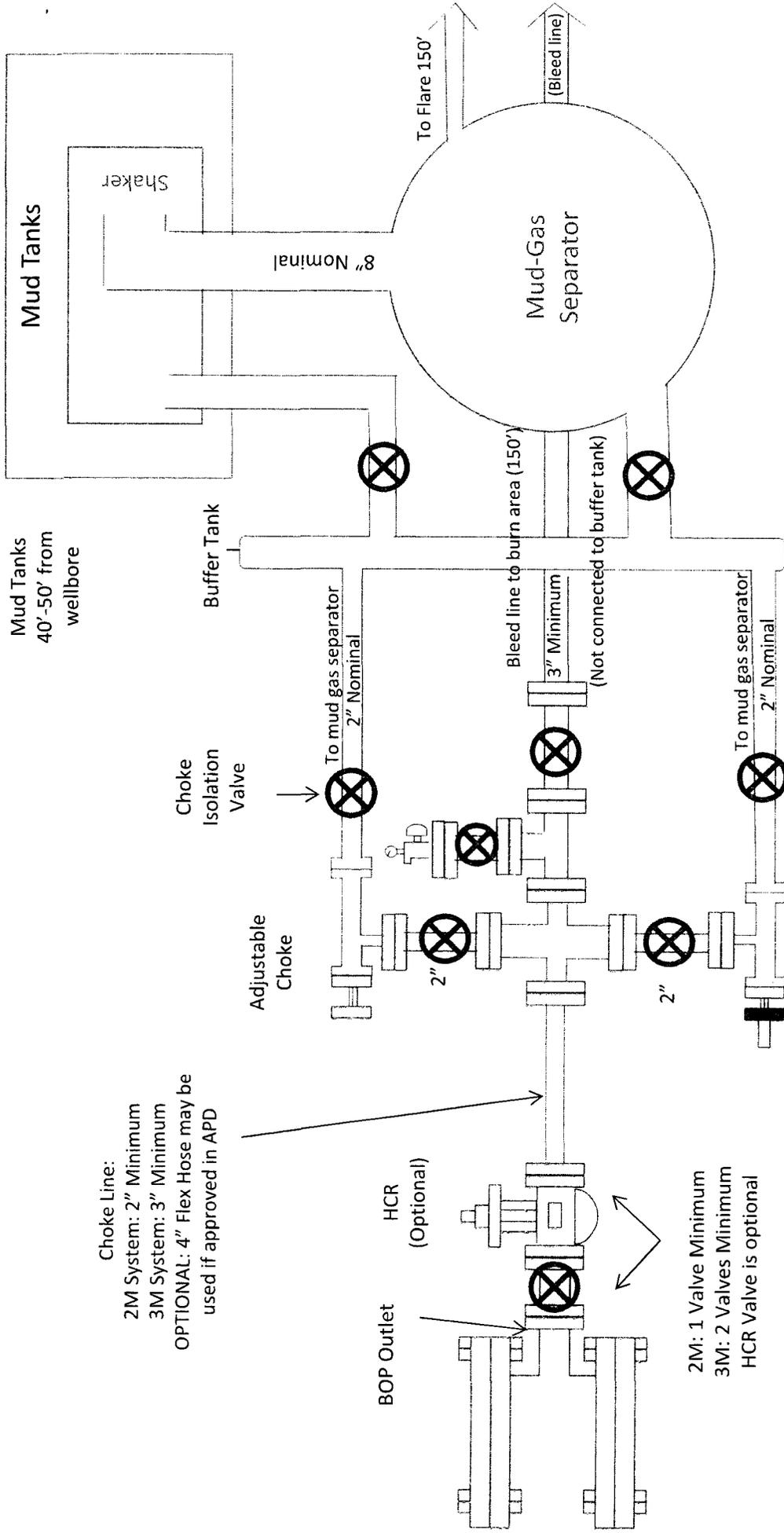
Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N S ° ' '')	Longitude (E W ° ' '')
	13200.00	89.54	179.94	9690.84	3287.43	-3218.41	-934.67	0.00	416097.33	571099.57	N 32 8 38.02	W 104 14 13.82
	13300.00	89.54	179.94	9691.64	3387.04	-3318.41	-934.56	0.00	415997.34	571099.68	N 32 8 37.03	W 104 14 13.82
	13400.00	89.54	179.94	9692.44	3486.65	-3418.40	-934.46	0.00	415897.35	571099.79	N 32 8 36.04	W 104 14 13.82
	13500.00	89.54	179.94	9693.24	3586.26	-3518.40	-934.35	0.00	415797.36	571099.90	N 32 8 35.05	W 104 14 13.82
	13600.00	89.54	179.94	9694.04	3685.87	-3618.40	-934.24	0.00	415697.37	571100.01	N 32 8 34.06	W 104 14 13.82
	13700.00	89.54	179.94	9694.83	3785.48	-3718.39	-934.13	0.00	415597.39	571100.12	N 32 8 33.07	W 104 14 13.82
	13800.00	89.54	179.94	9695.63	3885.09	-3818.39	-934.02	0.00	415497.40	571100.23	N 32 8 32.08	W 104 14 13.82
	13900.00	89.54	179.94	9696.43	3984.70	-3918.39	-933.91	0.00	415397.41	571100.34	N 32 8 31.09	W 104 14 13.82
	14000.00	89.54	179.94	9697.23	4084.31	-4018.38	-933.80	0.00	415297.42	571100.45	N 32 8 30.10	W 104 14 13.82
	14100.00	89.54	179.94	9698.03	4183.92	-4118.38	-933.69	0.00	415197.44	571100.56	N 32 8 29.11	W 104 14 13.82
	14200.00	89.54	179.94	9698.83	4283.52	-4218.37	-933.58	0.00	415097.45	571100.67	N 32 8 28.12	W 104 14 13.82
	14300.00	89.54	179.94	9699.62	4383.13	-4318.37	-933.47	0.00	414997.46	571100.78	N 32 8 27.13	W 104 14 13.82
	14400.00	89.54	179.94	9700.42	4482.74	-4418.37	-933.36	0.00	414897.47	571100.89	N 32 8 26.14	W 104 14 13.82
	14500.00	89.54	179.94	9701.22	4582.35	-4518.37	-933.25	0.00	414797.49	571101.00	N 32 8 25.15	W 104 14 13.82
	14600.00	89.54	179.94	9702.02	4681.96	-4618.37	-933.14	0.00	414697.50	571101.11	N 32 8 24.16	W 104 14 13.82
	14700.00	89.54	179.94	9702.82	4781.57	-4718.36	-933.03	0.00	414597.51	571101.22	N 32 8 23.17	W 104 14 13.82
	14800.00	89.54	179.94	9703.62	4881.18	-4818.36	-932.92	0.00	414497.52	571101.33	N 32 8 22.19	W 104 14 13.82
	14900.00	89.54	179.94	9704.41	4980.79	-4918.36	-932.81	0.00	414397.54	571101.44	N 32 8 21.20	W 104 14 13.82
	15000.00	89.54	179.94	9705.21	5080.40	-5018.35	-932.70	0.00	414297.55	571101.55	N 32 8 20.21	W 104 14 13.82
	15100.00	89.54	179.94	9706.01	5180.01	-5118.35	-932.59	0.00	414197.56	571101.66	N 32 8 19.22	W 104 14 13.82
	15200.00	89.54	179.94	9706.81	5279.62	-5218.35	-932.48	0.00	414097.57	571101.77	N 32 8 18.23	W 104 14 13.82
	15300.00	89.54	179.94	9707.61	5379.23	-5318.34	-932.37	0.00	413997.59	571101.88	N 32 8 17.24	W 104 14 13.82
	15400.00	89.54	179.94	9708.41	5478.84	-5418.34	-932.26	0.00	413897.60	571101.99	N 32 8 16.25	W 104 14 13.82
	15500.00	89.54	179.94	9709.21	5578.45	-5518.34	-932.15	0.00	413797.61	571102.10	N 32 8 15.26	W 104 14 13.82
	15600.00	89.54	179.94	9710.00	5678.05	-5618.33	-932.04	0.00	413697.62	571102.20	N 32 8 14.27	W 104 14 13.82
	15700.00	89.54	179.94	9710.80	5777.66	-5718.33	-931.93	0.00	413597.64	571102.31	N 32 8 13.28	W 104 14 13.82
	15800.00	89.54	179.94	9711.60	5877.27	-5818.33	-931.82	0.00	413497.65	571102.42	N 32 8 12.29	W 104 14 13.81
	15900.00	89.54	179.94	9712.40	5976.88	-5918.32	-931.71	0.00	413397.66	571102.53	N 32 8 11.30	W 104 14 13.81
	16000.00	89.54	179.94	9713.20	6076.49	-6018.32	-931.60	0.00	413297.67	571102.64	N 32 8 10.31	W 104 14 13.81
	16100.00	89.54	179.94	9714.00	6176.10	-6118.32	-931.49	0.00	413197.69	571102.75	N 32 8 9.32	W 104 14 13.81
	16200.00	89.54	179.94	9714.80	6275.71	-6218.31	-931.38	0.00	413097.70	571102.86	N 32 8 8.33	W 104 14 13.81
	16300.00	89.54	179.94	9715.59	6375.32	-6318.31	-931.27	0.00	412997.71	571102.97	N 32 8 7.34	W 104 14 13.81
	16400.00	89.54	179.94	9716.39	6474.93	-6418.31	-931.16	0.00	412897.72	571103.08	N 32 8 6.35	W 104 14 13.81
	16500.00	89.54	179.94	9717.19	6574.54	-6518.30	-931.05	0.00	412797.74	571103.19	N 32 8 5.36	W 104 14 13.81
	16600.00	89.54	179.94	9717.99	6674.15	-6618.30	-930.94	0.00	412697.75	571103.30	N 32 8 4.37	W 104 14 13.81
	16700.00	89.54	179.94	9718.79	6773.76	-6718.29	-930.83	0.00	412597.76	571103.41	N 32 8 3.38	W 104 14 13.81
	16800.00	89.54	179.94	9719.59	6873.37	-6818.29	-930.72	0.00	412497.77	571103.52	N 32 8 2.40	W 104 14 13.81
	16900.00	89.54	179.94	9720.38	6972.98	-6918.29	-930.61	0.00	412397.78	571103.63	N 32 8 1.41	W 104 14 13.81
	17000.00	89.54	179.94	9721.18	7072.58	-7018.28	-930.50	0.00	412297.80	571103.74	N 32 8 0.42	W 104 14 13.81
	17200.00	89.54	179.94	9722.78	7271.80	-7218.28	-930.29	0.00	412097.82	571103.96	N 32 7 58.44	W 104 14 13.81
	17300.00	89.54	179.94	9723.58	7371.41	-7318.28	-930.18	0.00	411997.83	571104.07	N 32 7 57.45	W 104 14 13.81
	17400.00	89.54	179.94	9724.38	7471.02	-7418.27	-930.07	0.00	411897.85	571104.18	N 32 7 56.46	W 104 14 13.81
	17500.00	89.54	179.94	9725.18	7570.63	-7518.27	-929.96	0.00	411797.86	571104.29	N 32 7 55.47	W 104 14 13.81
	17600.00	89.54	179.94	9725.97	7670.24	-7618.27	-929.85	0.00	411697.87	571104.40	N 32 7 54.48	W 104 14 13.81
	17700.00	89.54	179.94	9726.77	7769.85	-7718.26	-929.74	0.00	411597.88	571104.51	N 32 7 53.49	W 104 14 13.81
	17800.00	89.54	179.94	9727.57	7869.46	-7818.26	-929.63	0.00	411497.90	571104.62	N 32 7 52.50	W 104 14 13.81
	17900.00	89.54	179.94	9728.37	7969.07	-7918.26	-929.52	0.00	411397.91	571104.73	N 32 7 51.51	W 104 14 13.81
	18000.00	89.54	179.94	9729.17	8068.68	-8018.25	-929.41	0.00	411297.92	571104.84	N 32 7 50.52	W 104 14 13.81
	18100.00	89.54	179.94	9729.97	8168.29	-8118.25	-929.30	0.00	411197.93	571104.95	N 32 7 49.53	W 104 14 13.81
	18200.00	89.54	179.94	9730.77	8267.90	-8218.25	-929.19	0.00	411097.95	571105.06	N 32 7 48.54	W 104 14 13.81
	18300.00	89.54	179.94	9731.56	8367.51	-8318.24	-929.08	0.00	410997.96	571105.17	N 32 7 47.55	W 104 14 13.81
	18400.00	89.54	179.94	9732.36	8467.12	-8418.24	-928.97	0.00	410897.97	571105.28	N 32 7 46.56	W 104 14 13.81
	18500.00	89.54	179.94	9733.16	8566.72	-8518.24	-928.86	0.00	410797.98	571105.39	N 32 7 45.57	W 104 14 13.81
	18600.00	89.54	179.94	9733.96	8666.33	-8618.24	-928.75	0.00	410698.00	571105.50	N 32 7 44.58	W 104 14 13.81
	18700.00	89.54	179.94	9734.76	8765.94	-8718.23	-928.64	0.00	410598.01	571105.61	N 32 7 43.59	W 104 14 13.81
	18800.00	89.54	179.94	9735.56	8865.55	-8818.23	-928.53	0.00	410498.02	571105.72	N 32 7 42.61	W 104 14 13.81

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 °.′.″)
	18900.00	89.54	179.94	9736.36	8965.16	-8918.23	-928.42	0.00	410398.03	571105.83	N 32 7 41.62	W 104 14 13.81
	19000.00	89.54	179.94	9737.15	9064.77	-9018.22	-928.31	0.00	410298.05	571105.93	N 32 7 40.63	W 104 14 13.81
	19100.00	89.54	179.94	9737.95	9164.38	-9118.22	-928.20	0.00	410198.06	571106.04	N 32 7 39.64	W 104 14 13.81
	19200.00	89.54	179.94	9738.75	9263.99	-9218.22	-928.09	0.00	410098.07	571106.15	N 32 7 38.65	W 104 14 13.81
	19300.00	89.54	179.94	9739.55	9363.60	-9318.21	-927.98	0.00	409998.08	571106.26	N 32 7 37.66	W 104 14 13.81
	19400.00	89.54	179.94	9740.35	9463.21	-9418.21	-927.87	0.00	409898.10	571106.37	N 32 7 36.67	W 104 14 13.81
	19500.00	89.54	179.94	9741.15	9562.82	-9518.21	-927.76	0.00	409798.11	571106.48	N 32 7 35.68	W 104 14 13.81
	19600.00	89.54	179.94	9741.94	9662.43	-9618.20	-927.65	0.00	409698.12	571106.59	N 32 7 34.69	W 104 14 13.81
	19700.00	89.54	179.94	9742.74	9762.04	-9718.20	-927.54	0.00	409598.13	571106.70	N 32 7 33.70	W 104 14 13.81
	19800.00	89.54	179.94	9743.54	9861.65	-9818.20	-927.43	0.00	409498.15	571106.81	N 32 7 32.71	W 104 14 13.81
	19900.00	89.54	179.94	9744.34	9961.26	-9918.19	-927.32	0.00	409398.16	571106.92	N 32 7 31.72	W 104 14 13.81
	20000.00	89.54	179.94	9745.14	10060.86	-10018.19	-927.21	0.00	409298.17	571107.03	N 32 7 30.73	W 104 14 13.80
	20100.00	89.54	179.94	9745.94	10160.47	-10118.19	-927.10	0.00	409198.18	571107.14	N 32 7 29.74	W 104 14 13.80
	20200.00	89.54	179.94	9746.74	10260.08	-10218.18	-926.99	0.00	409098.20	571107.25	N 32 7 28.75	W 104 14 13.80
	20300.00	89.54	179.94	9747.53	10359.69	-10318.18	-926.88	0.00	408998.21	571107.36	N 32 7 27.76	W 104 14 13.80
	20400.00	89.54	179.94	9748.33	10459.30	-10418.18	-926.77	0.00	408898.22	571107.47	N 32 7 26.77	W 104 14 13.80
	20500.00	89.54	179.94	9749.13	10558.91	-10518.17	-926.66	0.00	408798.23	571107.58	N 32 7 25.78	W 104 14 13.80
	20600.00	89.54	179.94	9749.93	10658.52	-10618.17	-926.55	0.00	408698.24	571107.69	N 32 7 24.79	W 104 14 13.80
Cimarex Davinci 7-18 Federal Com #6H - PBHL [330' FSL, 250 FWL]	20608.80	89.54	179.94	9750.00	10667.28	-10626.97	-926.55	0.00	408689.45	571107.70	N 32 7 24.71	W 104 14 13.80

Survey Type: Non-Def Plan

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

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	20.000	1/100.000	30.000		NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / Cimarex Davinci 7-18 Federal Com #6H Rev0 RM 08Nov16
	1	20.000	20608.796	1/100.000	30.000		NAL_MWD_PLUS_0.5_DEG	Original Borehole / Cimarex Davinci 7-18 Federal Com #6H



Choke Line:
 2M System: 2" Minimum
 3M System: 3" Minimum
 OPTIONAL: 4" Flex Hose may be used if approved in APD

2M: 1 Valve Minimum
 3M: 2 Valves Minimum
 HCR Valve is optional

REMOTELY OPERATED Adjustable Choke

Choke Isolation Valve

Exhibit E-1 – Choke Manifold Diagram
Davinic 7-18 Federal Com 6H
 Cimarex Energy Co.
 6-255-27E
 Eddy County, NM

**Drilling Operations
 Choke Manifold
 2M/3M Service**

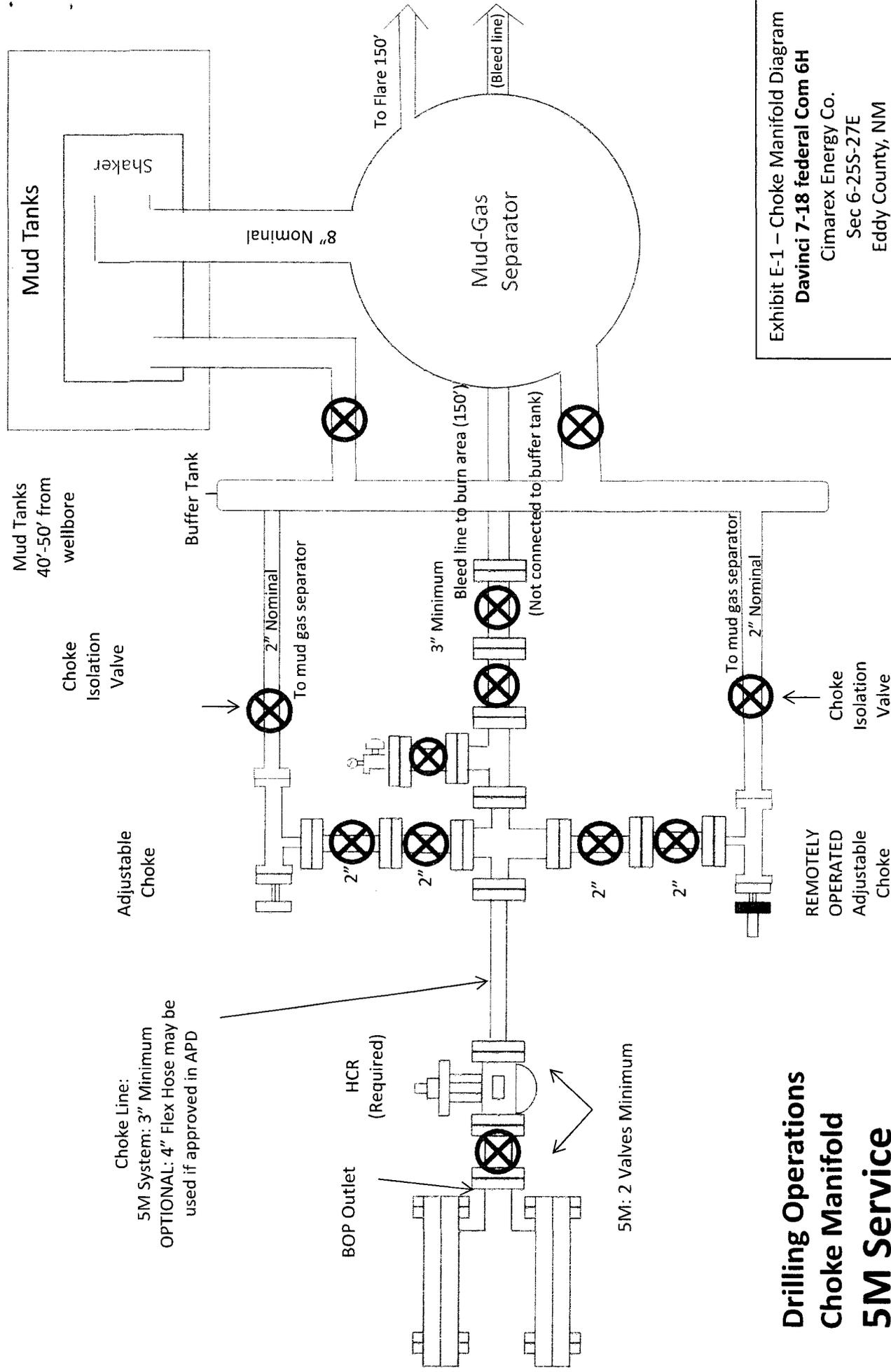
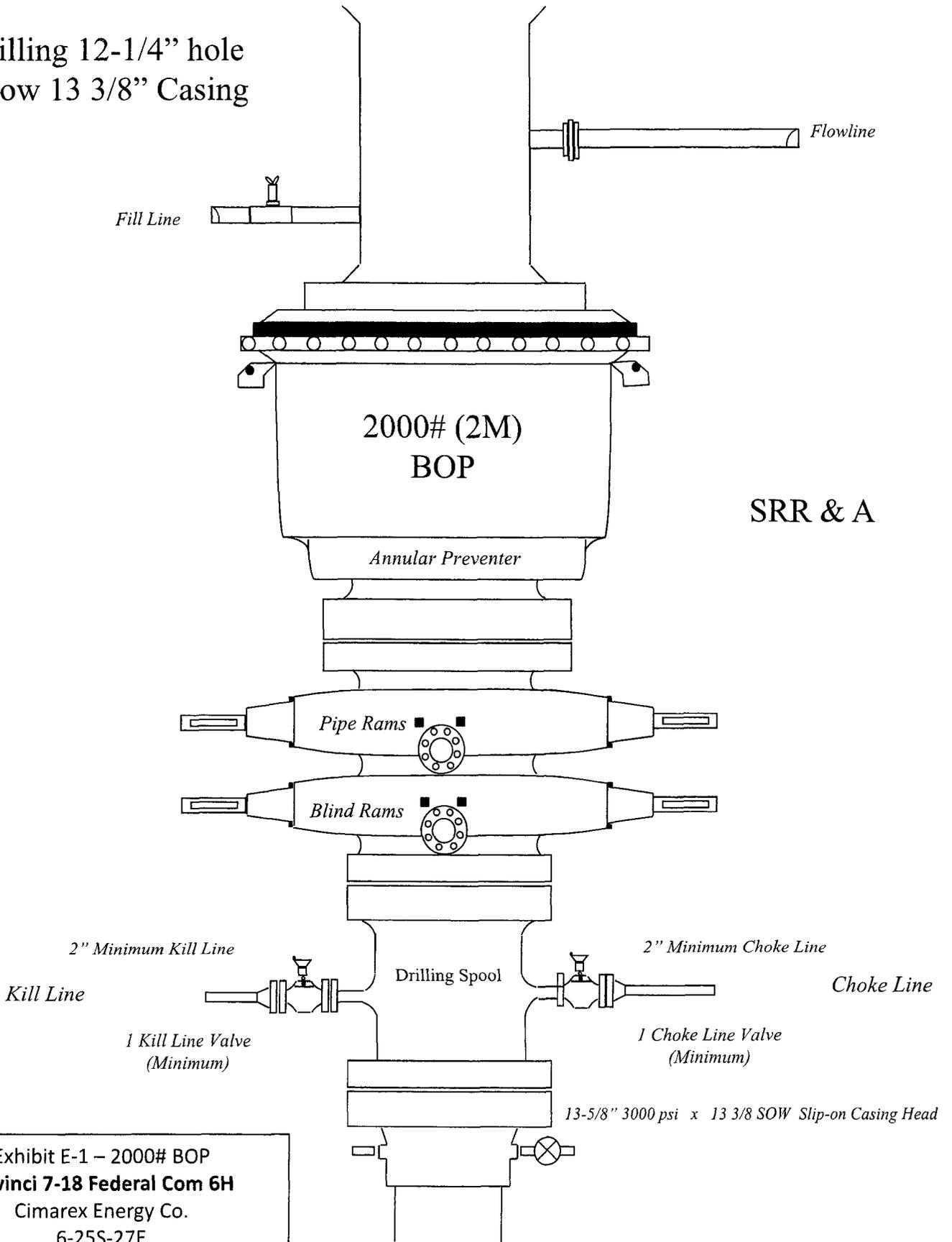


Exhibit E-1 – Choke Manifold Diagram
Davinci 7-18 federal Com 6H
 Cimarex Energy Co.
 Sec 6-25S-27E
 Eddy County, NM

**Drilling Operations
 Choke Manifold
 5M Service**

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



SRR & A

Exhibit E-1 – 2000# BOP
Davinci 7-18 Federal Com 6H
Cimarex Energy Co.
6-25S-27E
Eddy, NM

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

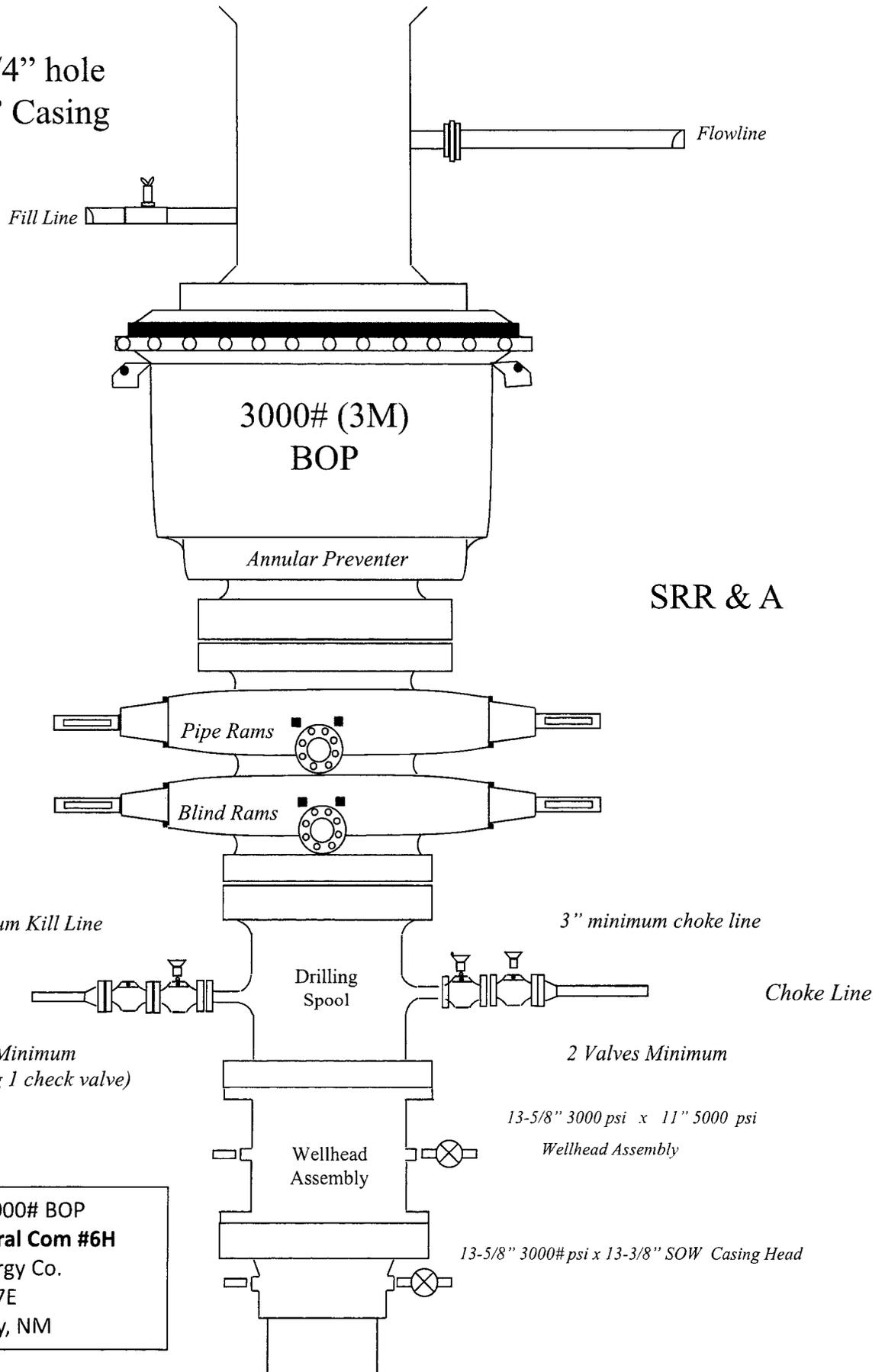


Exhibit E-1 – 3000# BOP
Davinci 7-18 Federal Com #6H
 Cimarex Energy Co.
 6-25S-27E
 Eddy County, NM

Drilling 6" hole below 7" Casing

Fill Line

Flowline

5000# (5M)
BOP

Annular Preventer

SRR & A

Pipe Rams

Blind Rams

2" Minimum Kill Line

3" minimum choke line

Kill Line

Drilling Spool

Choke Line

2 Valves and a check valve

2 Valves Minimum
(HCR Required)

Wellhead Assembly

11" 5000 psi x 7-1/16" 10,000 psi
Wellhead Assembly

Wellhead Assembly

13-5/8" 3000 psi x 11" 5000 psi
Wellhead Assembly

Wellhead Assembly

13-5/8" 3000#psi x 13-3/8" SOW Casing Head

Exhibit E-1 – 5000# BOP
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
Sec 6-25S-27E
Eddy County, NM

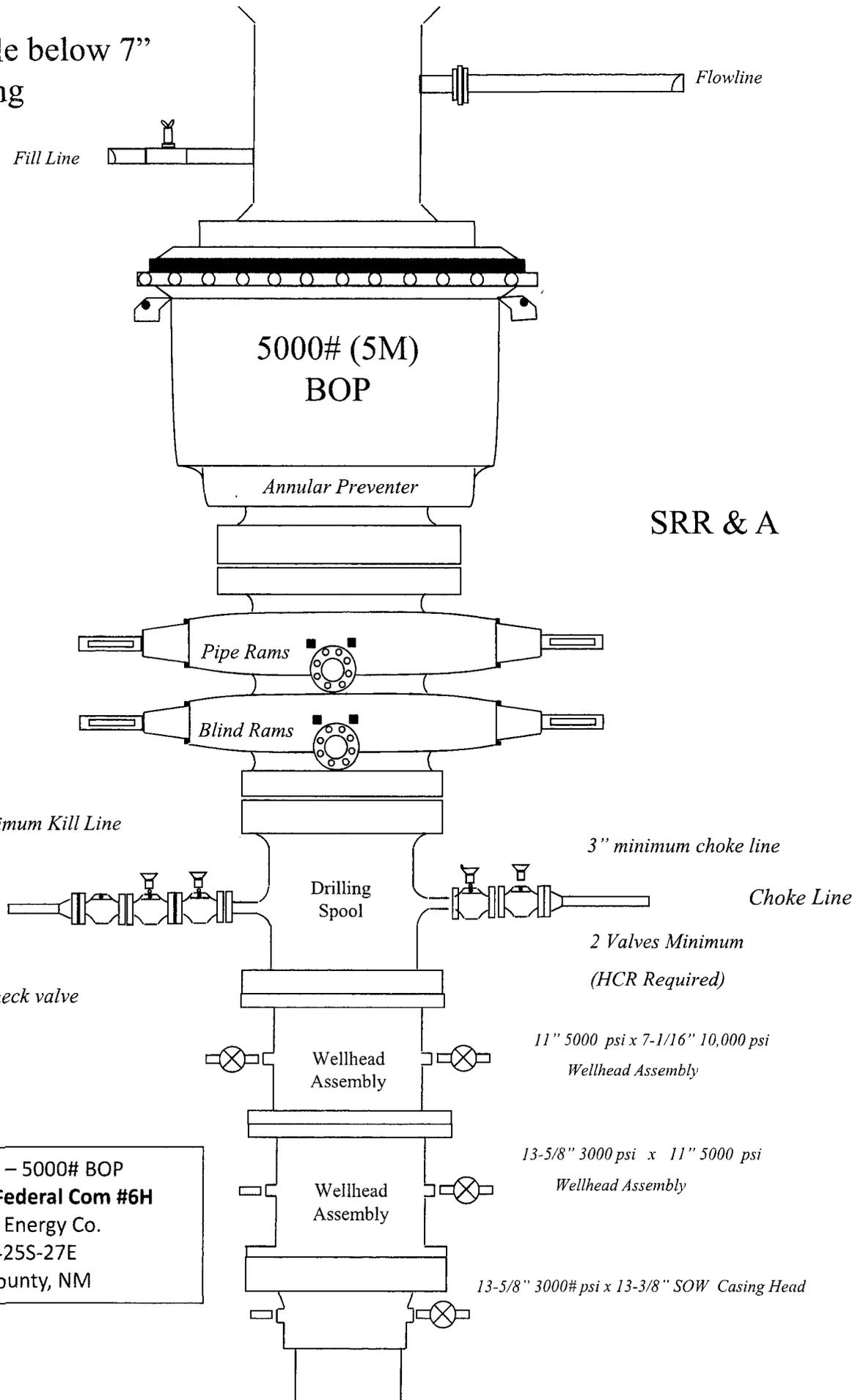


Exhibit F – Co-Flex Hose
Davinci 7-18 Federal Com 6H
Cimarex Energy Co.
06-25S-27E
Eddy County, NM

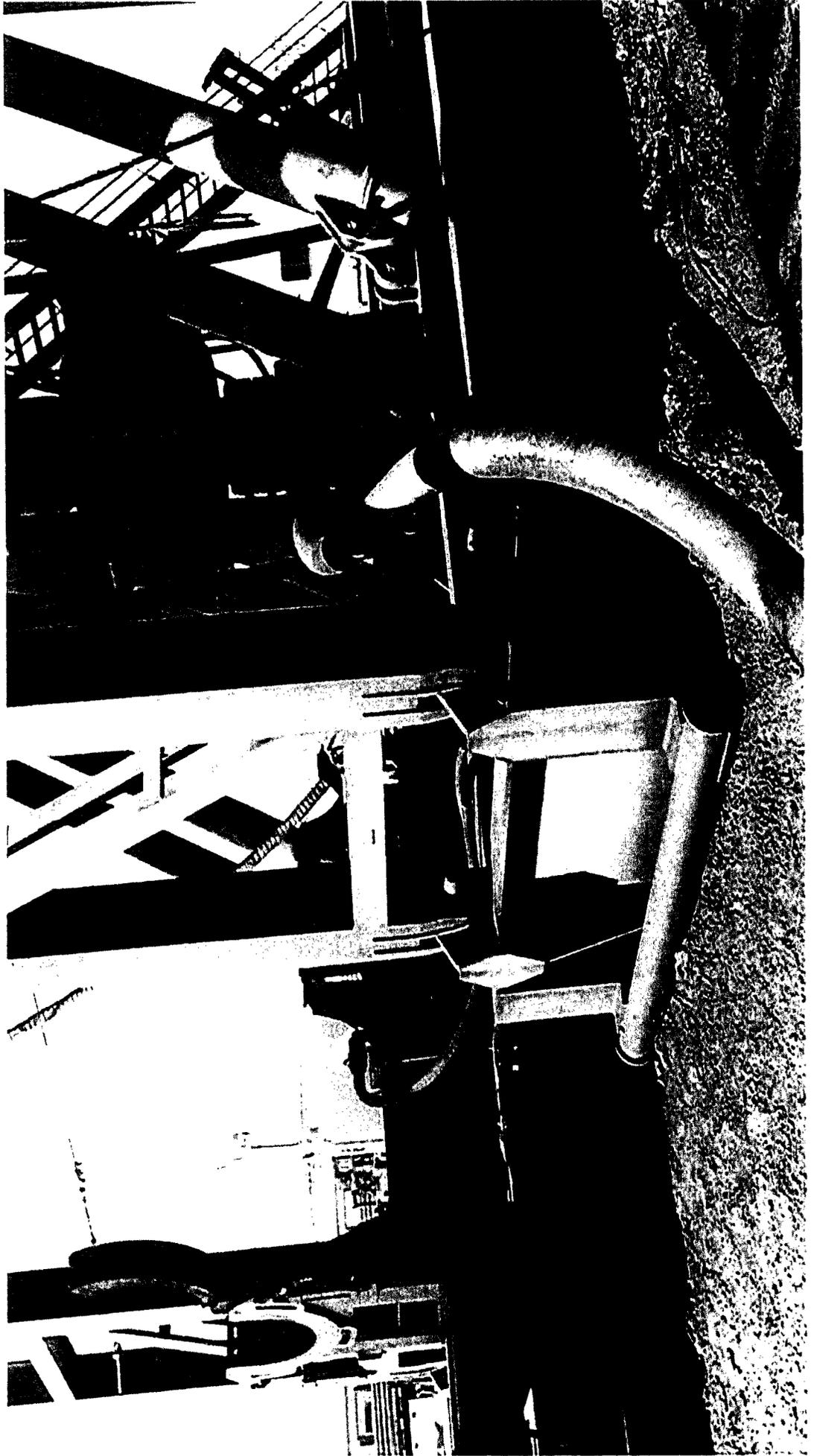


Exhibit F-1 – Co-Flex Hose Hydrostatic Test
 Davinci 7-18 Federal Com #6H
 Cimarex Energy Co.
 6-25S-27E
 Eddy County, NM



Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT		
Customer: Oderco Inc		P.O. Number: odyd-271
HOSE SPECIFICATIONS		
Type: Stainless Steel Armor Choke & Kill Hose	Hose Length: 45'ft.	
I.D. 4 INCHES	O.D. 9 INCHES	
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI	BURST PRESSURE 0 PSI
COUPLINGS		
Stem Part No. OKC OKC	Ferrule No. OKC OKC	
Type of Coupling: Swage-lt		
PROCEDURE		
<i>Hose assembly pressure tested with water at ambient temperature.</i>		
TIME HELD AT TEST PRESSURE 15 MIN.	ACTUAL BURST PRESSURE: 0 PSI	
Hose Assembly Serial Number: 79793	Hose Serial Number: OKC	
Comments:		
Date: 3/8/2011	Tested:	Approved: 



Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

March 3, 2011

Hose Specifications

Hose Type: C & F
 I.D.: 4"
 Working Pressure: 10000 PSI

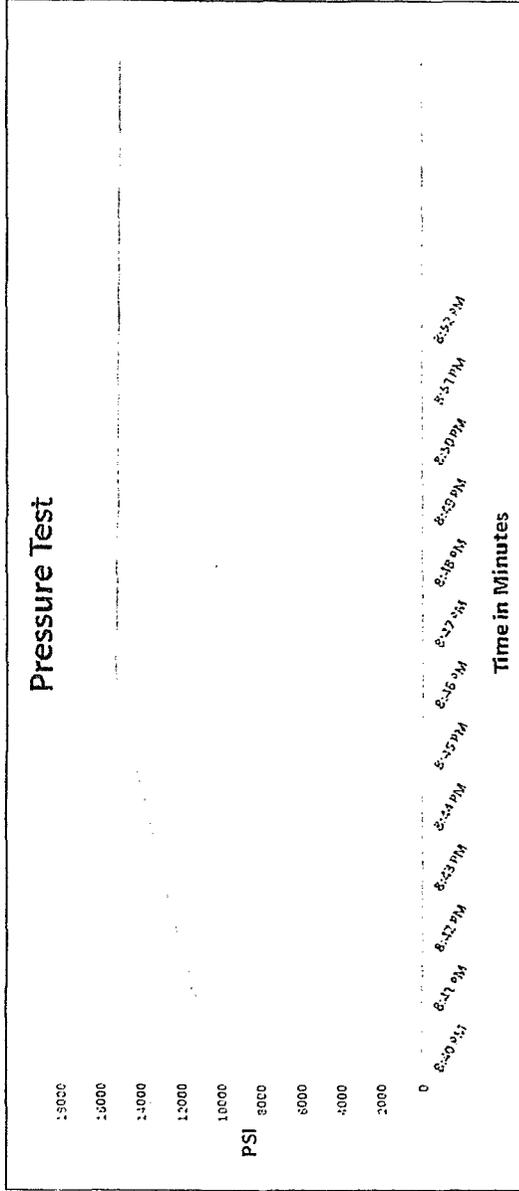
Length: 45'
 O.D.: 6.09"
 Burst Pressure: Standard Safety Multiplier: 4.17

Verification

Type of Fittings: 4 1/16 10K
 Die Size: 6.38"
 Hose Serial #: 5544

Caulking Method: Swage
 Final O.D.: 6.29"
 Hose Assembly Serial #: 79793

Pressure Test



Test Pressure: 15000 PSI

Time Held at Test Pressure: 11 Minutes

Actual Burst Pressure: 15483 PSI

Peak Pressure: 15483 PSI

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

Tested By: Zac McConnell

Approved By: Kim Thomas

Exhibit F-2 – Co-Flex Hose
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
06-25S-27E
Eddy County, NM



Midwest Hose & Specialty, Inc.

Certificate of Conformity

Customer: DEM	PO ODYD-271
-------------------------	-----------------------

SPECIFICATIONS

Sales Order 79793	Dated: 3/8/2011
-----------------------------	---------------------------

We hereby certify 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: <i>Jonal Garcia</i>	Date: 3/8/2011
---	--------------------------



Exhibit F -3- Co-Flex Hose
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
6-25S-27E
Eddy County, NM

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium components. 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 vermiculite 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, unbolt 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)

Hydrogen Sulfide Drilling Operations Plan
Davinci 7-18 Federal Com 6H
Cimarex Energy Co.
UL: 7, Sec. 6, 25S, 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 H₂S
- 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.

H₂S 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 (H₂S 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 H₂S has on tubular goods and other mechanical equipment.
- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

H₂S Contingency Plan
Davinci 7-18 Federal Com 6H
Cimarex Energy Co.
UL: 7, Sec. 6, 25S, 27E
Eddy Co., NM

Emergency Procedures

In the event of a release of gas containing H₂S, 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 H₂S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the 432-620-1975
- « 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 H₂S, 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 (SO₂). 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 H₂S and SO₂

Please see attached International Chemical Safety Cards.

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).

H₂S Contingency Plan Emergency Contacts
Davinci 7-18 Federal Com 6H
 Cimarex Energy Co.
 UL: 7, Sec. 6, 25S, 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
Charlie Pritchard	Drilling Superintendent	432-620-1975	432-238-7084
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	

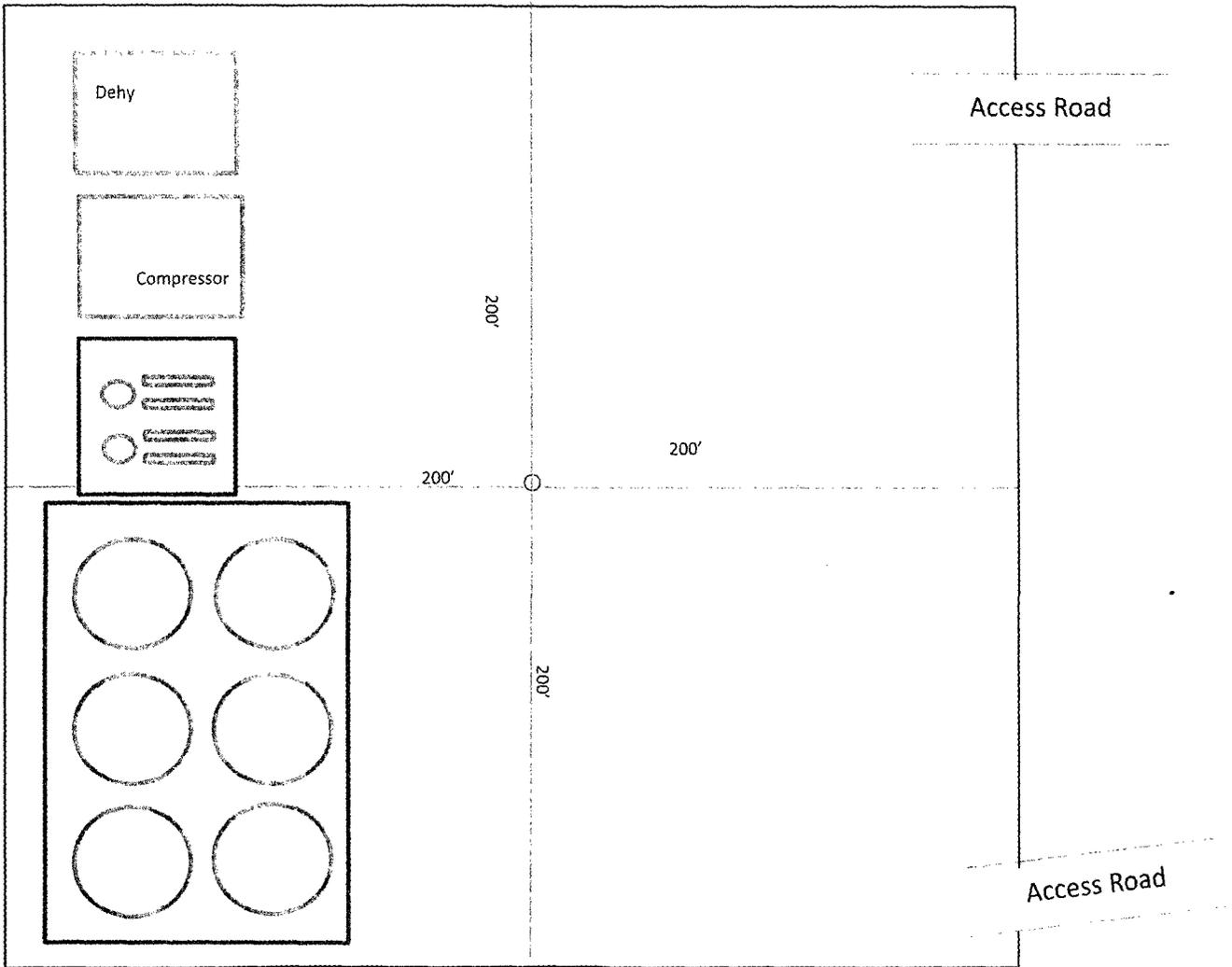
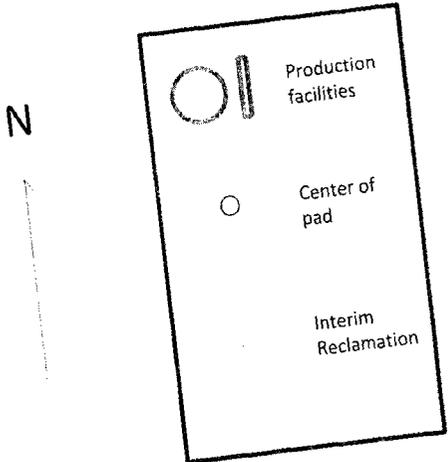


Exhibit D
 Production Facilities Layout Diagram
Davinci 7-18 Federal Com 6H
 Cimarex Energy Co.
 6-25S-27E
 Eddy, NM



Surface Use Plan
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
UL: D, Sec. 6, 25S, 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:

- Please see Exhibit B and C-1 for existing access road planned to be used to access the proposed project.
- Cimarex Energy will improve or maintain existing roads in a condition the same as or better than before the operations began. Cimarex Energy will repair pot holes, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
- Cimarex Energy will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.
- Cimarex Energy will obtain written BLM approval prior to the application of surfactants, binding agents, or other dust suppression chemicals on the roadways.
- 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 otherwise noted in the New or Reconstructed Access Roads section of the surface use plan.

Beginning at the intersection of Black River Village Road and Old Cavern HWY to the South (Located in the SW 1/4 of Section 8, 24S, 27E, NMPM) proceed in a southerly, then southwesterly direction approximately 5.9 miles to the beginning of the proposed access to the northwest; follow road flags in a northwesterly direction approximately 50' to the proposed location. total distance from the intersection of black river village and old cavern Hwy to the proposed well location is approximately 5.9 miles.

2. New of Reconstructed Access Roads:

- A new road will be constructed for this project.
- Cimarex Energy plans to construct 331.57' of new on-lease access road to service the well. The planned access road does not cross lease boundaries, a right of way grant will not be acquired from the BLM.
- 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.
- Proposed and existing access road route to the proposed wellsite is depicted on Exhibit C-2. 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. Well Radius Map

Please see Exhibit A for wells within one mile of the proposed well SHL and BHL.

4. Proposed or Existing 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 Davinci 7-18 Federal Battery.
- Please see Exhibit D for location of the off pad central tank battery.
- Cimarex Energy proposes to install two 4 inch buried HP steel lines down existing lease road to the Davinci 7-18 Federal Battery.
- Two lease roads will be constructed to access the battery. Northern off lease road: 49.81" and southern off lease road: 49.85". Please see Exhibit C-2
- Allocation will be based on well test. Flowline route is off lease, please see Exhibit G-1. Any changes to on lease route will be submitted via sundry notice. If route is off lease, a right of way will be submitted to the BLM for approval.

Surface Use Plan
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
UL: D, Sec. 6, 25S, 27E
Eddy Co., NM

5. Gas Pipeline

- Cimarex plans to construct an off lease gas pipeline to service this battery location.
- Please see Exhibit G for pipeline route
- Specification of pipeline: 12" LP Steel for Gas, 8" HP Steel for Gas, 4" steel for buy back from purchaser..
- Line will be buried and will require a construction width of 30'.
- Length of 12" line: 3,338.24", Length of 8" line: 3,338.24 Length of 4" line: 3,343.23
- MAOP: 12" line 1440 psi, 8" line 1440 psi, 4" buy back line: 1440 psi
- Anticipated working pressure: 12" gas line: 300 psi, 8" gas line: 1100 psi, 4" buy back line: 1100 psi

6. Flowlines

- Cimarex Energy plans to construct on lease flowlines to service the well.
- Specifications of pipeline: 1 HP steel for oil, gas, and water production. 1 HP steel for gas lift.
- Both lines will be buried 25'-35' North of the access road.
- Length of Gas Lift Line: 1774.5'
- Length of Flowlines: 1759.69'
- MAOP: 1500 psi.
- Anticipated working pressure: flowlines: 200-300 psi, gas lift: 1100 psi.

7. Salt Water Disposal

- Cimarex plans to construct an off lease SWD pipeline to service this battery location.
- SWD well name: Liberty 24 Federal Com, Well Number: 1 SWD
- Operator of SWD: Cimarex Energy Co. of Colorado
- API of SWD well: 30-015-33094
- SWD Permit #: SWD-1216
- Please see Exhibit I for pipeline route.
- Specification of pipeline: 4" poly & 12" poly
- The 4" line will not be buried and the 12" line will be buried. Both will require a construction width of 30'.
- Length: 4828.02'
- MAOP: 125 psi.
- Anticipated working pressure: 110 psi.
- Pipeline will be constructed 20-30' from and parallel to an existing route.

8. Electric Lines

- Cimarex Energy plans to construct an off-lease electric line to service the well. The proposed electric line does cross lease boundaries, a right of way grant will be submitted to and obtained from the BLM.
- Cimarex Energy plans to install an overhead electric line from the proposed well to an existing overhead electric line located in NE of section 12. The proposed electric line will be 5123.91' in length, 1-40 poles, 12.7 kv, 4 wire, 3 phase. The electric line will exit off the North side of the well location and travel 5123.91' until it would intercept the existing electric line located in the NWNE of Sec. 12-25S-26E.
- Please see Exhibit H. Any changes to E-Line route will be submitted via sundry notice.

9. Water

Cimarex Energy plans to purchase fresh water from a 3rd party company. A local commercial source will truck water utilizing the access road. Please see Exhibit C-1 for access road route.

10. 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 BLM-approved caliche pit.

11. Methods of Handling Waste

- Drilling fluids, produced oil, and water from the well during drilling and completion operations will be stored safely and disposed of properly in a NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal site.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other waste will be removed and disposed of properly at a state approved disposal site.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

12. Ancillary Facilities:

No camps or airstrips to be constructed.

13. Well Site Layout:

- Exhibit D: Rig Layout
- Exhibit D-2: Well Site layout plat
- 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. Exhibit D-1: Interim Reclamation Diagram.

14. Interim and Final Reclamation

- In areas planned for final reclamation, surfacing materials will be removed and returned to a mineral pit or recycled to repair or build roads and well pads.
- Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.
- If the well is a dry hole, the pad and road area will be re-contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.
- As approved at onsite there will be no interim reclamation as the pad will be used for further development in the area.

Surface Use Plan
Davinci 7-18 Federal Com #6H
Cimarex Energy Co.
UL: D, Sec. 6, 25S, 27E
Eddy Co., NM

15. Surface Ownership:

- The wellsite is on surface owned by BLM, 620 E Greene St. Carlsbad NM, 5752345972.
- A copy of Surface Use Agreement has been given to the surface owner.
- The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.

16. Other Information:

- Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- Archeological survey will be conducted for the well pad/location and proposed road and the arch report will be filed with the BLM.
- There are no known dwellings within 1½ miles of this location.

17. On Site Notes and Information:

Top soil north. No Interim reclamation. No V-Door or Frac pad designation. Construct a ditch and berm system on northeast corner of pad to divert water run-off from pad. Access road and gas lift/Production line from southeast corner, southeast, to lease road and to off-site battery.

MAY 30 2017

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

RECEIVED

OPERATOR'S NAME:	Cimarex Energy Co
LEASE NO.:	NM110348
WELL NAME & NO.:	Davinci 7 18 Fed Com - 6H
SURFACE HOLE FOOTAGE:	350'/FSL & 1190'/FWL
BOTTOM HOLE FOOTAGE:	330'/FSL & 250'/FWL, sec. 18
LOCATION:	Sec. 6, T. 25 S, R. 27 E
COUNTY:	Eddy County

I. 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. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values 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 Rustler top and 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) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least **8 hours**. WOC time will be recorded in the driller's log. 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.

Possibility of water flows in the Castile.

Possibility of lost circulation in the Castile and in the Delaware.

HIGH CAVE/KARST

A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. ON A THREE STRING DESIGN; IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

1. The 13-3/8 inch surface casing shall be set at approximately 450 feet and cemented to the surface. **If salt is penetrated set casing 25' above the top of the salt.**
 - 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 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.**

3. The minimum required fill of cement behind the **7** inch production casing is:

- Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Excess calculates to 22% - Additional cement may be required.**

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

4. The minimum required fill of cement behind the **4 1/2** inch production liner is:

- Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Excess calculates to negative 9% - Additional cement will be required.**

5. 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.
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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7** inch production casing shoe shall be **5000 (5M)** psi.

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

6. 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.

F. SPECIAL REQUIREMENT(S)

Communitization Agreement:

1. The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

2. If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
3. In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

CRW 052217

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Cimarex Energy Co
LEASE NO.:	NM110348
WELL NAME & NO.:	Davinci 7 18 Fed Com - 6H
SURFACE HOLE FOOTAGE:	350'S & 190'W
BOTTOM HOLE FOOTAGE:	330'S & 250'W, sec. 18
LOCATION:	Section 6, T. 25 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.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Cave/Karst
 - Watershed
- Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- Road Section Diagram**
- Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- Interim Reclamation**
- 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)

Cave and Karst Conditions of Approval

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

The north, east, and west sides of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, siting values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Watershed

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be

allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.

- Any water erosion that may occur due to the construction of the well pad during the life of the well will be corrected within two weeks and proper measures will be taken to prevent future erosion.
- Cimarex would also install a 3-foot-high berm and a diversion ditch around the northeast corner of the well pad to control surface water runoff during construction and operation of the well location.
- Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.
- Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.
- When crossing the ephemeral stream that drains into North Hackberry Draw erosion and sediment controls must be placed to mitigate any impacts downstream and/or to the floodplain.

Surface & Buried Pipeline COAs Only:

- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

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

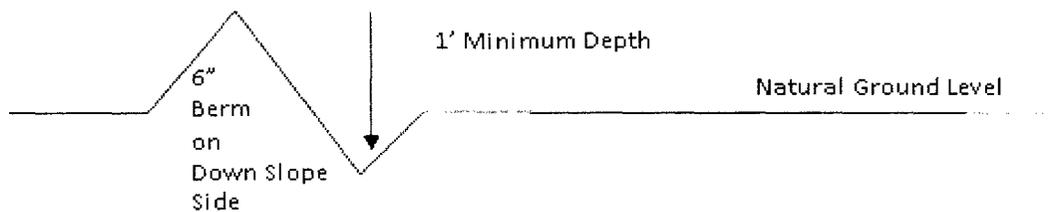
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out-sloping and in-sloping, 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:

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

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards 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 cattle guards 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

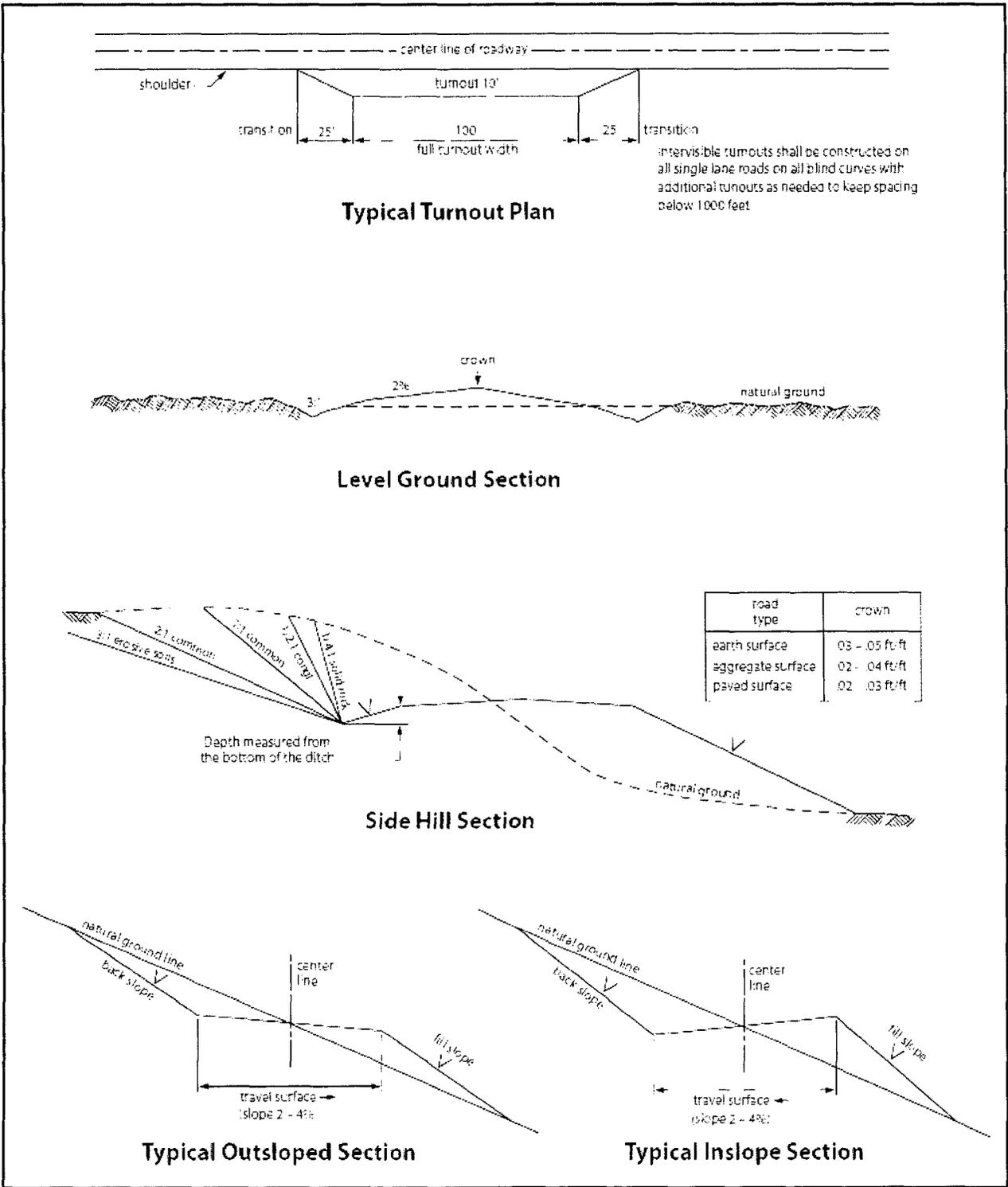


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. 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).

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third

parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage;

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of 20 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.
8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.
9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder 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 will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. 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, powerline 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.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 *et seq.* (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

- | | |
|--|--|
| <input checked="" type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3 |
| <input type="checkbox"/> seed mixture 2 | <input type="checkbox"/> seed mixture 4 |
| <input type="checkbox"/> seed mixture 2/LPC | <input type="checkbox"/> Aplomado Falcon Mixture |

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates “Standard Environmental Colors” – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. 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 associated roads, 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.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.

- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 *et seq.* (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Power lines shall be constructed and designed in accordance to standards outlined in

"Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

VIII. 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).

IX. 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).

Seed Mixture 1 for Loamy Sites

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 shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may 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:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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