

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144 CLEZ
July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOC District Office

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: <u>Cimarex Energy Co. of Colorado</u> OGRID #: <u>162683</u>	
Address: <u>600 N. Marienfeld St., Ste. 600, Midland, TX 79701</u>	
Facility or well name: <u>Thyme APY Federal No. 4</u>	
API Number: <u>30-025-40438</u>	OCD Permit Number: <u>PI-04189</u>
U/L or Qtr/Qtr: <u>4</u> Section: <u>1</u> Township: <u>23S</u> Range: <u>32E</u> County: <u>Lea</u>	
Center of Proposed Design Latitude: <u>32° 20' 34.45"</u> Longitude: <u>103° 38' 08.31"</u> NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983	
Surface Owner: <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment	

2. <input checked="" type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC	
Operation: <input checked="" type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) <input type="checkbox"/> P&A	
<input type="checkbox"/> Above Ground Steel Tanks or <input checked="" type="checkbox"/> Haul-off Bins	

3. Signs: Subsection C of 19.15.17.11 NMAC	
<input type="checkbox"/> 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
<input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC	

4. Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC	
<i>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.</i>	
<input checked="" type="checkbox"/> Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC	
<input checked="" type="checkbox"/> Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC	
<input checked="" type="checkbox"/> Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
<input type="checkbox"/> Previously Approved Design (attach copy of design)	API Number: _____
<input type="checkbox"/> Previously Approved Operating and Maintenance Plan	API Number: _____

5. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)	
<i>Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.</i>	
Disposal Facility Name: <u>CRI</u>	Disposal Facility Permit Number: <u>R-9166</u>
Disposal Facility Name: _____	Disposal Facility Permit Number: _____
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that <i>will not</i> be used for future service and operations?	
<input type="checkbox"/> Yes (If yes, please provide the information below) <input checked="" type="checkbox"/> No	
<i>Required for impacted areas which will not be used for future service and operations:</i>	
<input type="checkbox"/> Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
<input type="checkbox"/> Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC	
<input type="checkbox"/> Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	

6. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.	
Name (Print): <u>Zeno Farris</u>	Title: <u>Manager Operations Administration</u>
Signature: <u>Zeno Farris</u>	Date: <u>12.28.2011</u>
e-mail address: <u>zfarris@cimarex.com</u>	Telephone: <u>432-620-1938</u>

7.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only)
OCD Representative Signature: _____ **Approval Date:** 02/14/12
Title: PETROLEUM ENGINEER **OCD Permit Number:** 91-04189

8.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
☐ Closure Completion Date: _____

9.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No
Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

10.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): _____ **Title:** _____
Signature: _____ **Date:** _____
e-mail address: _____ **Telephone:** _____

Cimarex Energy Co. of Colorado – Closed-Loop System Design Plan

Equipment List

- Primary Shakers
- Mud Cleaner – hydro-cyclones
- 1 or 2 Centrifuges (depending on well depth)
- De-watering system with pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing (may not be necessary for shallower wells)
- Drying Augur
- Sump Drying Augur
- Sump
- Cuttings Boxes
- Reserve Fluids Tank Farm
- Wire Mesh Trash Enclosure (spent motor oils kept in separate containers and later sent to approved landfill)

Operation and Maintenance

The Cimarex Zero Discharge system is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This ensures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

These closed loop operations can be monitored by our service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

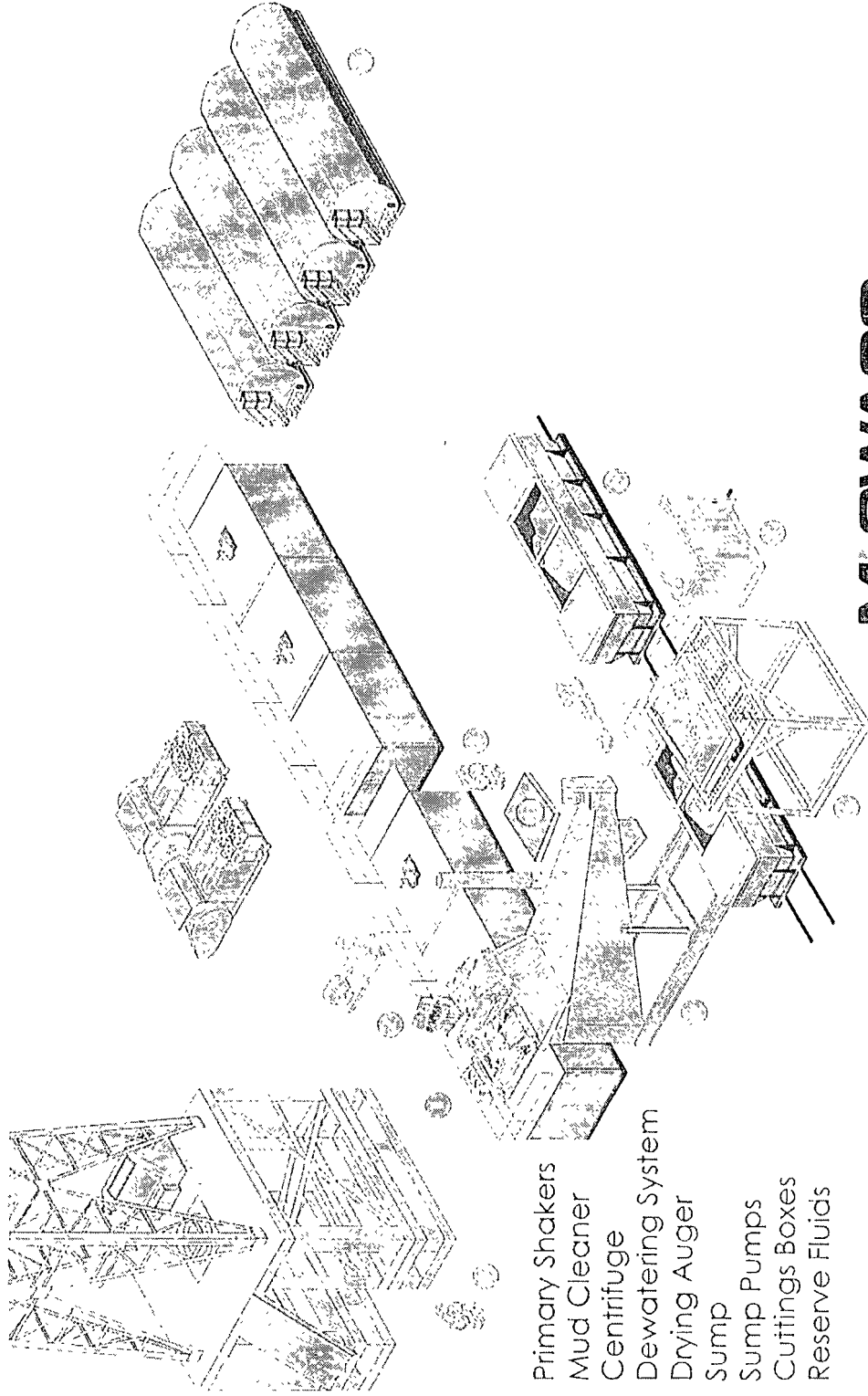
Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and tested for all regulated toxic materials. If found they are removed and disposed of per regulatory requirements.

Closure Plan

During drilling operations, all liquids, drilling fluids, and cuttings will be hauled off via CRI (Controlled Recovery Incorporated, Permit R-9166).



Closed Loop with Drying Auger and Dewatering System



- Primary Shakers
- Mud Cleaner
- Centrifuge
- Dewatering System
- Drying Auger
- Sump
- Sump Pumps
- Cuttings Boxes
- Reserve Fluids

MISWACO

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

Revised July 16, 2010

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name THYME "APY" FEDERAL	Well Number 4
OGRID No.	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3736'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 4	1	23 S	32 E		330	NORTH	375	WEST	LEA

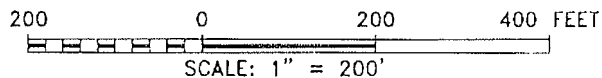
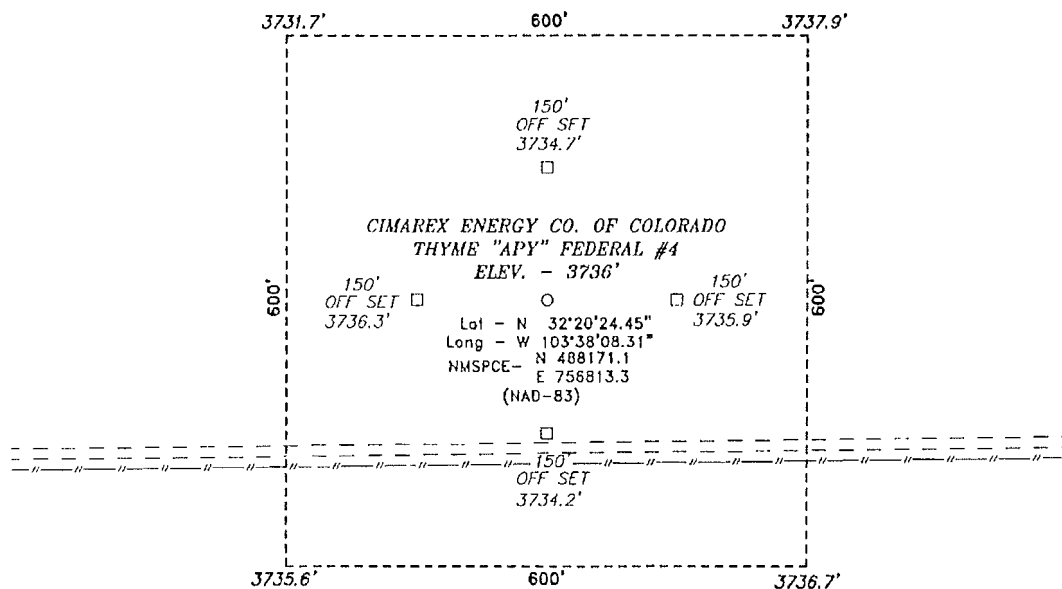
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	1	23 S	32 E		330	SOUTH	375	WEST	LEA
Dedicated Acres	Joint or Infill	Consolidation Code	Order No						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>5731.7' 3737.9'</p> <p>LOT 4</p> <p>330'</p> <p>1375'</p> <p>3735.6' 3736.7'</p> <p>4006.6'</p> <p>375'</p> <p>330'</p> <p>375'</p> <p>330'</p>	<p>LOT 3</p> <p><u>SURFACE LOCATION</u></p> <p>Lat - N 32°20'24.45"</p> <p>Long - W 103°38'08.31"</p> <p>NMSPCE - N 488171.1</p> <p>E 756813.3</p> <p>(NAD-83)</p>	<p>LOT 2</p>	<p>LOT 1</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>Email Address _____</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>Date Surveyed _____</p> <p>Signature & Seal of Professional Surveyor _____</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS 24892</p>
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SECTION 1, TOWNSHIP 23 SOUTH, RANGE 32 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location.

FROM MILE MARKER 19 OF HWY 128, GO
NORTHEAST 5.6 MILES TO LEASE ROAD, ON LEASE
ROAD GO NORTHWEST 1.4 MILES TO LEASE ROAD,
ON LEASE ROAD GO NORTH 2.7 MILES TO LEASE
ROAD, ON LEASE ROAD GO EAST 0.3 MILES TO
PROPOSED LOCATION

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number. 24892

Drawn By: J. SMALL

Date: 07-21-2011

Disk: JMS 24892

CIMAREX ENERGY CO. OF COLORADO

REF: THYME "APY" FEDERAL #4 / WELL PAD TOPO

THE THYME "APY" FEDERAL #1 LOCATED 330'

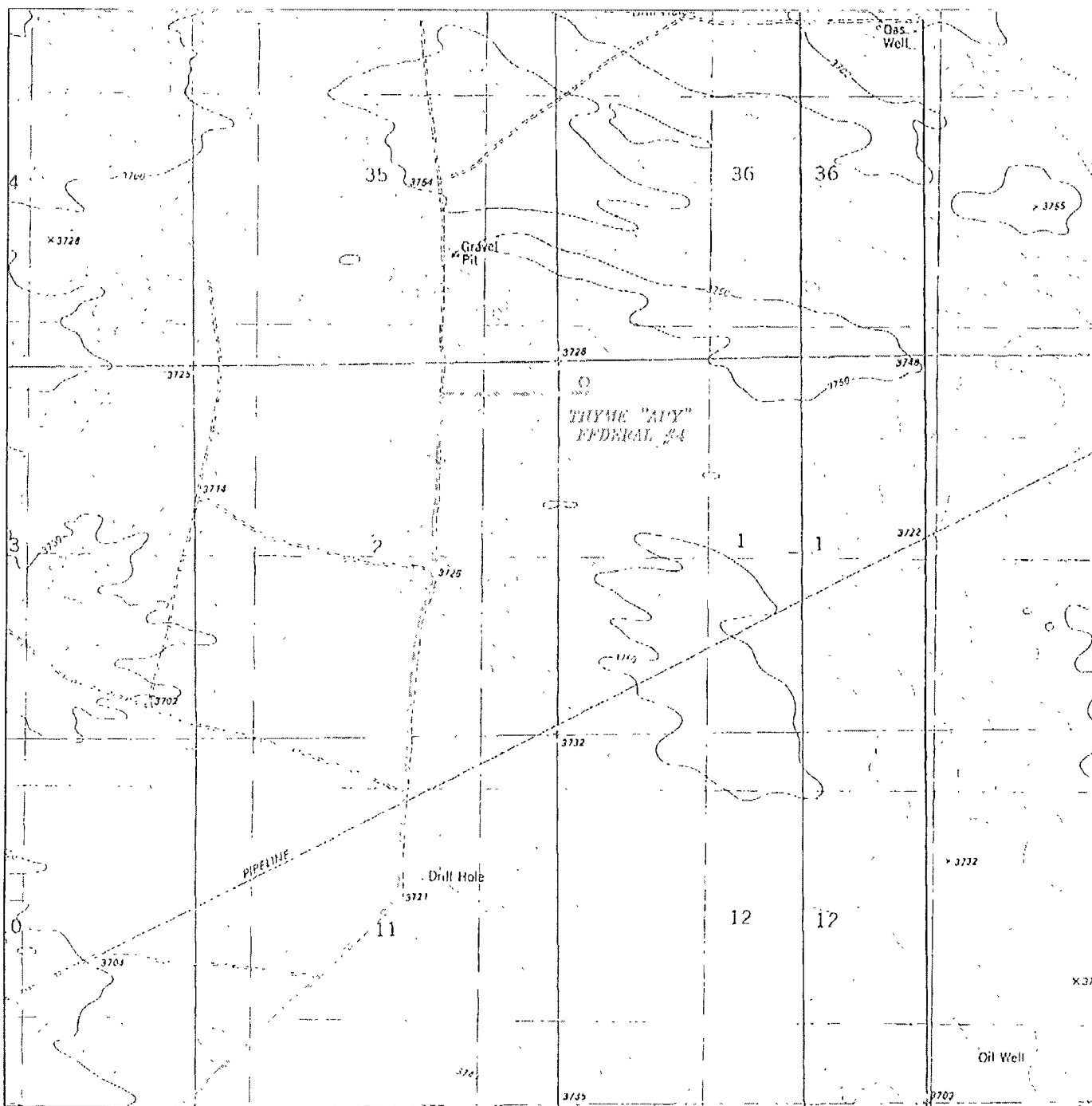
FROM THE NORTH LINE AND 375' FROM THE WEST LINE OF

SECTION 1, TOWNSHIP 23 SOUTH, RANGE 32 EAST,

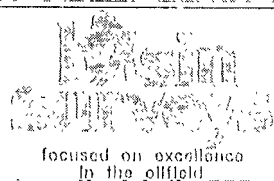
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 07-20-2011

Sheet 1 of 1 Sheets



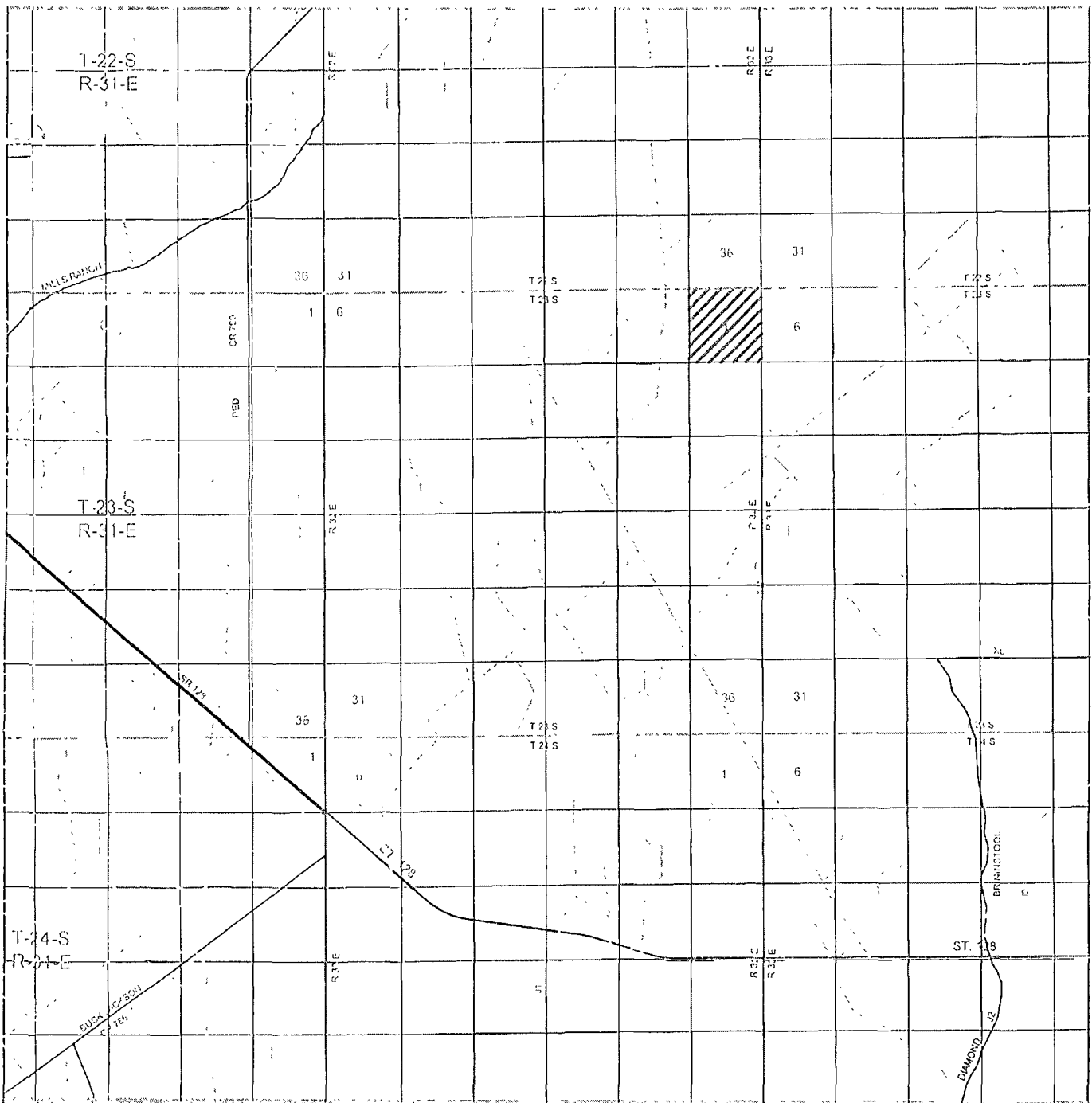
THYME "APY" FEDERAL #4
 Located 330' FNL and 375' FWL
 Section 1, Township 23 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



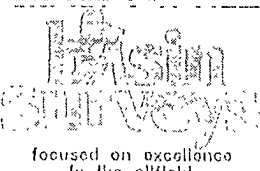
P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 businsurveys.com

W.O. Number: JMS 24892
 Survey Date: 07-20-2011
 Scale: 1" = 2000'
 Date: 07-21-2011

CIMAREX
 ENERGY CO.
 OF COLORADO



THYME "APY" FEDERAL #4
 Located 330' FNL and 375' FWL
 Section 1, Township 23 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.

 <p>focused on excellence in the oilfield</p>	<p>P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 -- Office (575) 392-2206 -- Fax basinsurvoy.com</p>	W.O. Number: JMS 240868	<p>CIMAREX ENERGY CO. OF COLORADO</p>
		Survey Date: 07-20-2011	
		Scale: 1" = 2 Miles	
		Date: 07-21-2011	