

Supporting COGCC Documents

**LINN Operating Inc.
O-29 Centralized E&P Waste
Management Facility**

OA Project No. 014-1565

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State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



| | | | |
|--------------------------------------|----|----|----|
| DE | ET | OE | ES |
| Document Number: 400678095 | | | |
| Date Received: 09/03/2014 | | | |

SUNDRY NOTICE

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 10516 Contact Name HEIDI BANG
 Name of Operator: LINN OPERATING INC Phone: (303) 999-4262
 Address: 1999 BROADWAY SUITE 3700 Fax: (303) 999-4362
 City: DENVER State: CO Zip: 80202 Email: HBANG@LINNENERGY.COM

Complete the Attachment
Checklist

OP OGCC

API Number : 05- 045 00 OGCC Facility ID Number: 335964
 Well/Facility Name: CHEVRON I31 596 Well/Facility Number: _____
 Location QtrQtr: NESE Section: 31 Township: 5S Range: 96W Meridian: 6
 County: GARFIELD Field Name: GRAND VALLEY
 Federal, Indian or State Lease Number: _____

| | | |
|---------------------|--|--|
| Survey Plat | | |
| Directional Survey | | |
| Srfc Eqpmt Diagram | | |
| Technical Info Page | | |
| Other | | |

CHANGE OF LOCATION OR AS BUILT GPS REPORT

- Change of Location * As-Built GPS Location Report As-Built GPS Location Report with Survey

* Well location change requires new plat. A substantive surface location change may require new Form 2A.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude _____ PDOP Reading _____ Date of Measurement _____
 Longitude _____ GPS Instrument Operator's Name _____

LOCATION CHANGE (all measurements in Feet)

Well will be: _____ (Vertical, Directional, Horizontal)

Change of **Surface** Footage **From** Exterior Section Lines:

Change of **Surface** Footage **To** Exterior Section Lines:

Current **Surface** Location **From** QtrQtr NESE Sec 31

New **Surface** Location **To** QtrQtr _____ Sec _____

Change of **Top of Productive Zone** Footage **From** Exterior Section Lines:

Change of **Top of Productive Zone** Footage **To** Exterior Section Lines:

Current **Top of Productive Zone** Location **From** Sec _____

New **Top of Productive Zone** Location **To** Sec _____

Change of **Bottomhole** Footage **From** Exterior Section Lines:

Change of **Bottomhole** Footage **To** Exterior Section Lines:

Current **Bottomhole** Location Sec _____ Twp _____

New **Bottomhole** Location Sec _____ Twp _____

Is location in High Density Area? _____

Distance, in feet, to nearest building _____, public road: _____, above ground utility: _____, railroad: _____,

property line: _____, lease line: _____, well in same formation: _____

Ground Elevation _____ feet Surface owner consultation date _____

| FNL/FSL | | FEL/FWL | |
|---------------|------------------|-------------------|------------|
| <u>1530</u> | <u>FSL</u> | <u>609</u> | <u>FEL</u> |
| _____ | _____ | _____ | _____ |
| Twp <u>5S</u> | Range <u>96W</u> | Meridian <u>6</u> | |
| Twp _____ | Range _____ | Meridian _____ | |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| Twp _____ | Range _____ | | |
| Twp _____ | Range _____ | | |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

**

**

** attach deviated drilling plan

OTHER CHANGES

REMOVE FROM SURFACE BOND Signed surface use agreement is a required attachment

CHANGE OF WELL, FACILITY OR OIL & GAS LOCATION NAME OR NUMBER

From: Name CHEVRON I31 596 Number _____ Effective Date: _____

To: Name _____ Number _____

ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.

WELL: Abandon Application for Permit-to-Drill (Form2) – Well API Number _____ has not been drilled.

PIT: Abandon Earthen Pit Permit (Form 15) – COGCC Pit Facility ID Number _____ has not been constructed (Permitted and constructed pit requires closure per Rule 905)

CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number _____ has not been constructed (Constructed facility requires closure per Rule 908)

OIL & GAS LOCATION ID Number: _____

Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.

Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.

Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.

REQUEST FOR CONFIDENTIAL STATUS

DIGITAL WELL LOG UPLOAD

DOCUMENTS SUBMITTED Purpose of Submission: _____

RECLAMATION

INTERIM RECLAMATION

Interim Reclamation will commence approximately _____

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Interim reclamation complete, site ready for inspection.

Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.

Field inspection will be conducted to document Rule 1003.e. compliance

FINAL RECLAMATION

Final Reclamation will commence approximately _____

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

Field inspection will be conducted to document Rule 1004.c. compliance

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned _____ Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT _____

SPUD DATE: _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

NOTICE OF INTENT Approximate Start Date 09/10/2014

REPORT OF WORK DONE Date Work Completed _____

- | | | |
|--|---|--|
| <input type="checkbox"/> Intent to Recomplete (Form 2 also required) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Mangement Plan |
| <input type="checkbox"/> Change Drilling Plan | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Change | <input type="checkbox"/> Rule 502 variance requested. Must provide detailed info regarding request. | |
| <input checked="" type="checkbox"/> Other <u>Water Reuse Plan</u> | <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases | |

COMMENTS:

Water sharing for beneficial re-use up to 50,000 bbls.

H2S REPORTING

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: _____ in ppm (parts per million) Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: _____

COMMENTS:

Empty rectangular box for comments.

Best Management Practices

No BMP/COA Type

Description

| No BMP/COA Type | Description |
|-----------------|-------------|
| | |

Operator Comments:

Water will be collected at the following LINN facilities:

- Chevron I31 (COGCC Facility ID 335964)
- Latham CD32 (COGCC Facility ID 335842)
- Latham O29 (COGCC Facility ID 335836)
- Chevron C19 (COGCC Facility ID 417618)

The water will be transferred to the following locations:

- WPX TR 41-35-597 Pit #2 (COGCC Facility ID 422272)
- WPX TR 41-35-597 pit, WPX will transfer water via pump and existing WPX pipeline to the TR 24-28-597 well pad (COGCC Facility ID 33592)

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: HEIDI BANG
 Title: FIELD ADMIN 2 Email: HBANG@LINNENERGY.COM Date: 9/3/2014

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: FISCHER, ALEX Date: 9/15/2014

CONDITIONS OF APPROVAL, IF ANY:

COA Type

Description

| | |
|--|---|
| | <p>COA- APPROVAL OF THIS PLAN IS CONTINGENT UPON ANALYTICAL LABORATORY RESULTS FOR REPRESENTATIVE SAMPLES ENCANA WATER FROM LOCATION ID: 334939 and URSA Location ID 418828</p> <p>RESULTS SHALL BE SUBMITTED TO THE COGCC WITHIN 45 DAYS OF APPROVAL OF THIS PLAN. ANALYTICAL LABORATORY ANALYSIS SHALL INCLUDE:</p> <ul style="list-style-type: none"> •VOLATILE ORGANIC COMPOUNDSEPA METHOD 624 (GC/MS) •SEMI-VOLATILE ORGANIC COMPOUNDS EPA METHOD 625 (GC/MS) •DISSOLVED METALSEPA METHOD 200.7 (ICP) •DISSOLVED INORGANICS (NON-METALS)EPA METHOD 300.0 (IC) <ul style="list-style-type: none"> oBr,Cl,F,Nitrate/Nitrite, Sulfate •GENERAL WATER QUALITY PARAMETERS <ul style="list-style-type: none"> oSPECIFIC CONDUCTANCEEPA METHOD 300.0 (IC) oHARDNESSEPA METHOD 130.1 oTOTAL DISSOLVED SOLIDSEPA METHOD 160.1 oPHEPA METHOD 150.2 oALKALINITYEPA METHOD 310.1 •GROSS ALPHA AND BETA RADIOACTIVITYEPA METHOD 900.1 |
| | <p>PRODUCED WATER OR FLOWBACK WATER OR OTHER EXPLORATION AND PRODUCTION WASTE SHALL NOT BE TEMPORARILY STORED IN MODULAR LARGE VOLUME STORAGE TANKS (MLVSTs). PRODUCED WATER OR FLOWBACK WATER SHALL BE TEMPORARILY STORED IN FRAC TANKS.</p> |

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------------------------|-------------------------|
| Routing Review | Routed to A. Fischer for review. | 9/3/2014 10:21:39 AM |

Total: 1 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|--------------------|
| 400678095 | FORM 4 SUBMITTED |
| 400678098 | OTHER |
| 400678099 | REFERENCE AREA MAP |
| 400678105 | OTHER |

Total Attach: 4 Files



BERRY PETROLEUM
ROB SIMEONE

O-29 LATHAM 29-18D
SEPARATOR

Report Date: 10-05-2012 Sampled: 09-04-2012
Sample #: 23926 at 0000

Sample ID: 2580

SATURATION LEVEL

| | |
|--|---------|
| Calcite (CaCO ₃) | 0.985 |
| Aragonite (CaCO ₃) | 0.802 |
| Witherite (BaCO ₃) | 0.0275 |
| Strontianite (SrCO ₃) | 0.207 |
| Calcium oxalate (CaC ₂ O ₄) | 0.00 |
| Magnesite (MgCO ₃) | 0.146 |
| Anhydrite (CaSO ₄) | 0.00 |
| Gypsum (CaSO ₄ *2H ₂ O) | 0.00 |
| Barite (BaSO ₄) | 0.00 |
| Celestite (SrSO ₄) | 0.00 |
| Fluorite (CaF ₂) | 0.00 |
| Calcium phosphate | 0.00 |
| Hydroxyapatite | 0.00 |
| Silica (SiO ₂) | 0.00 |
| Brucite (Mg(OH) ₂) | < 0.001 |
| Magnesium silicate | 0.00 |
| Iron hydroxide (Fe(OH) ₃) | 329.98 |
| Strengite (FePO ₄ *2H ₂ O) | 0.00 |
| Siderite (FeCO ₃) | 202.86 |
| Halite (NaCl) | < 0.001 |
| Thenardite (Na ₂ SO ₄) | 0.00 |
| Iron sulfide (FeS) | 0.00 |

MOMENTARY EXCESS (Lbs/1000 Barrels)

| | |
|--|----------|
| Calcite (CaCO ₃) | -0.00247 |
| Aragonite (CaCO ₃) | -0.0396 |
| Witherite (BaCO ₃) | -7.47 |
| Strontianite (SrCO ₃) | -0.836 |
| Calcium oxalate (CaC ₂ O ₄) | -0.212 |
| Magnesite (MgCO ₃) | -0.760 |
| Anhydrite (CaSO ₄) | -670.57 |
| Gypsum (CaSO ₄ *2H ₂ O) | -908.08 |
| Barite (BaSO ₄) | -2.96 |
| Celestite (SrSO ₄) | -94.55 |
| Fluorite (CaF ₂) | -19.09 |
| Calcium phosphate | >-0.001 |
| Hydroxyapatite | -484.14 |
| Silica (SiO ₂) | -151.08 |
| Brucite (Mg(OH) ₂) | 0.0303 |
| Magnesium silicate | -166.23 |
| Iron hydroxide (Fe(OH) ₃) | < 0.001 |
| Strengite (FePO ₄ *2H ₂ O) | >-0.001 |
| Siderite (FeCO ₃) | 0.185 |
| Halite (NaCl) | -206533 |
| Thenardite (Na ₂ SO ₄) | -56031 |
| Iron sulfide (FeS) | -0.0972 |

SIMPLE INDICES

| | |
|--------------------|--------|
| Langelier | 0.0566 |
| Ryznar | 6.39 |
| Puckorius | 4.80 |
| Larson-Skold Index | 50.12 |
| Stiff Davis Index | 0.819 |
| Oddo-Tomson | 0.141 |

BOUND IONS

| | |
|-----------|--------|
| Calcium | 243.40 |
| Barium | 31.32 |
| Carbonate | 5.67 |
| Phosphate | 0.00 |
| Sulfate | 0.00 |

TOTAL

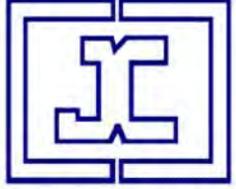
FREE

| |
|--------|
| 237.12 |
| 31.32 |
| 0.276 |
| 0.00 |
| 0.00 |

OPERATING CONDITIONS

| | |
|------------------|--------|
| Temperature (°F) | 190.00 |
| Time(secs) | 0.00 |

DownHole SAT™ Water Analysis Report



JACAM LABORATORIES

SYSTEM IDENTIFICATION

BERRY PETROLEUM
O-29 LATHAM 29-18D
ROB SIMEONE
SEPARATOR

Sample ID#: 23926
ID: 2580
Report Date: 10-05-2012
Sample Date: 09-04-2012
at 0000

WATER CHEMISTRY

CATIONS

| | |
|------------------------------|--------|
| Calcium(as Ca) | 243.40 |
| Magnesium(as Mg) | 18.18 |
| Barium(as Ba) | 31.32 |
| Strontium(as Sr) | 22.24 |
| Sodium(as Na) | 5758 |
| Potassium(as K) | 138.00 |
| Lithium(as Li) | 9.22 |
| Iron(as Fe) | 15.61 |
| Field Iron(as Fe) | 0.00 |
| Ammonia(as NH ₃) | 0.00 |
| Aluminum(as Al) | 0.00 |
| Manganese(as Mn) | 0.0120 |
| Zinc(as Zn) | 0.0940 |
| Lead(as Pb) | 0.00 |

ANIONS

| | |
|---|--------|
| Chloride(as Cl) | 9500 |
| Sulfate(as SO ₄) | 0.00 |
| Bromine(as Br) | 0.00 |
| Dissolved CO ₂ (as CO ₂) | 854.00 |
| Bicarbonate(as HCO ₃) | 325.00 |
| Carbonate(as CO ₃) | 0.00 |
| Silica(as Si) | 0.00 |
| Phosphate(as PO ₄) | 0.00 |
| H ₂ S (as H ₂ S) | 0.00 |
| Fluoride(as F) | 0.00 |
| Nitrate(as NO ₃) | 0.00 |
| Boron(as B) | 8.71 |

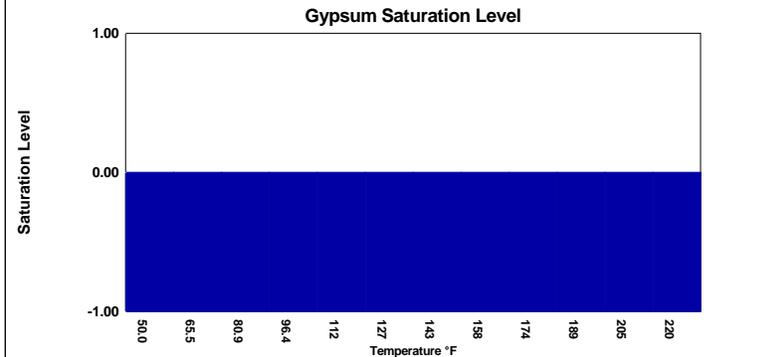
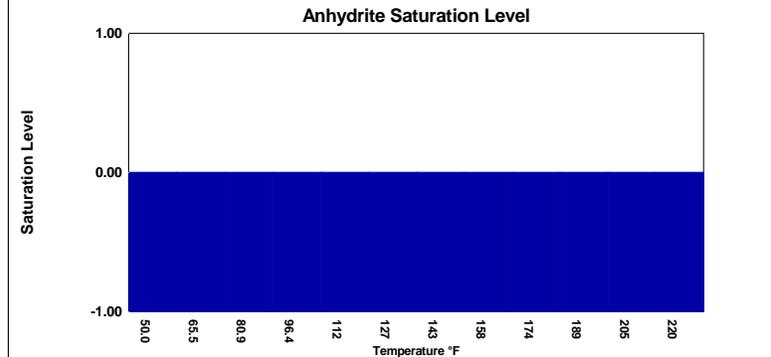
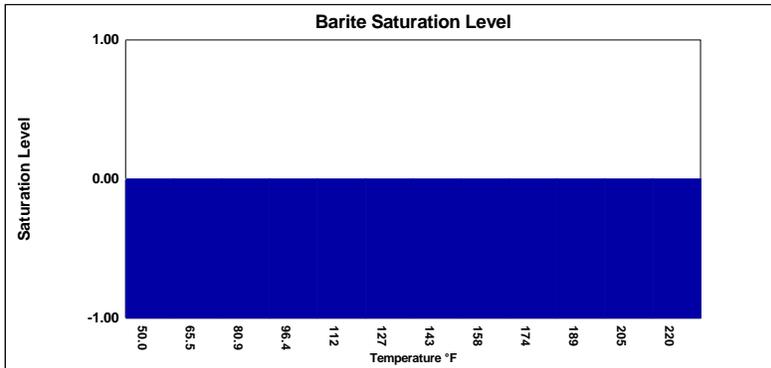
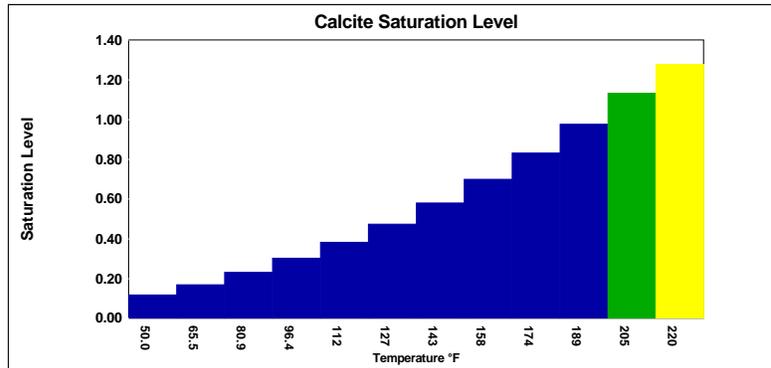
PARAMETERS

| | |
|-----------------|--------|
| Temperature(°F) | 190.00 |
| T.D.S. | 16103 |
| Resistivity: | 44.15 |
| Sample pH | 6.50 |
| Conductivity: | 22652 |

SCALE AND CORROSION POTENTIAL

| Temp. (°F) | Press. (atm) | Calcite CaCO ₃ | | Anhydrite CaSO ₄ | | Gypsum CaSO ₄ *2H ₂ O | | Barite BaSO ₄ | | Celestite SrSO ₄ | | Siderite FeCO ₃ | | Mackawenite FeS | | CO ₂ (mpy) | pCO ₂ (atm) |
|------------|--------------|---------------------------|---------------------------------|-----------------------------|---------------------------------|---|---------------------------------|--------------------------|---------------------------------|-----------------------------|---------------------------------|----------------------------|---------------------------------|-----------------|---------------------------------|-----------------------|------------------------|
| 50.00 | 0.00 | 0.117 | -0.335 | 0.00 | -1002 | 0.00 | -818.50 | 0.00 | -0.275 | 0.00 | -105.69 | 10.63 | 0.0468 | 0.00 | -0.0655 | 0.0714 | 0.0564 |
| 65.45 | 0.00 | 0.168 | -0.276 | 0.00 | -1012 | 0.00 | -844.10 | 0.00 | -0.414 | 0.00 | -108.72 | 17.14 | 0.0611 | 0.00 | -0.0675 | 0.134 | 0.0564 |
| 80.91 | 0.00 | 0.231 | -0.226 | 0.00 | -991.98 | 0.00 | -860.42 | 0.00 | -0.586 | 0.00 | -108.33 | 26.16 | 0.0755 | 0.00 | -0.0698 | 0.102 | 0.0564 |
| 96.36 | 0.00 | 0.302 | -0.183 | 0.00 | -945.29 | 0.00 | -868.20 | 0.00 | -0.785 | 0.00 | -106.12 | 37.98 | 0.0895 | 0.00 | -0.0723 | 0.134 | 0.0564 |
| 111.82 | 0.00 | 0.382 | -0.147 | 0.00 | -882.70 | 0.00 | -869.81 | 0.00 | -1.01 | 0.00 | -103.23 | 52.83 | 0.103 | 0.00 | -0.0752 | 0.140 | 0.0564 |
| 127.27 | 0.00 | 0.474 | -0.114 | 0.00 | -826.80 | 0.00 | -872.79 | 0.00 | -1.27 | 0.00 | -100.71 | 71.76 | 0.117 | 0.00 | -0.0784 | 0.118 | 0.0564 |
| 142.73 | 0.00 | 0.579 | -0.0837 | 0.00 | -778.84 | 0.00 | -878.02 | 0.00 | -1.59 | 0.00 | -98.62 | 95.57 | 0.132 | 0.00 | -0.0821 | 0.0953 | 0.0564 |
| 158.18 | 0.00 | 0.699 | -0.0556 | 0.00 | -737.68 | 0.00 | -885.49 | 0.00 | -1.96 | 0.00 | -96.93 | 124.77 | 0.148 | 0.00 | -0.0863 | 0.0992 | 0.0564 |
| 173.64 | 0.00 | 0.831 | -0.0292 | 0.00 | -702.40 | 0.00 | -895.26 | 0.00 | -2.41 | 0.00 | -95.60 | 159.63 | 0.165 | 0.00 | -0.0912 | 0.103 | 0.0564 |
| 189.09 | 0.00 | 0.976 | -0.00395 | 0.00 | -672.28 | 0.00 | -907.40 | 0.00 | -2.93 | 0.00 | -94.61 | 200.27 | 0.184 | 0.00 | -0.0969 | 0.0518 | 0.0564 |
| 204.55 | 0.00 | 1.13 | 0.0204 | 0.00 | -646.74 | 0.00 | -922.03 | 0.00 | -3.54 | 0.00 | -93.96 | 246.30 | 0.203 | 0.00 | -0.104 | 0.0434 | 0.0564 |
| 220.00 | 0.171 | 1.28 | 0.0422 | 0.00 | -634.33 | 0.00 | -952.41 | 0.00 | -4.32 | 0.00 | -94.85 | 293.80 | 0.225 | 0.00 | -0.114 | 0.0591 | 0.0660 |
| | | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | Lbs per xSAT 1000 Barrels | | |

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}{CO₃}/K_{sp}. pCO₂ (atm) is the partial pressure of CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.



State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



| | | | |
|--------------------------------------|----|----|----|
| DE | ET | OE | ES |
| Document Number: <u>400518980</u> | | | |
| Date Received: <u>11/26/2013</u> | | | |

SUNDRY NOTICE

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 10091 Contact Name HEIDI BANG
 Name of Operator: BERRY PETROLEUM COMPANY LLC Phone: (303) 999-4262
 Address: 1999 BROADWAY STE 3700 Fax: (303) 999-4362
 City: DENVER State: CO Zip: 80202 Email: HSB@BRY.COM

Complete the Attachment
Checklist

OP OGCC

API Number : 05- 045 00 OGCC Facility ID Number: 290544
 Well/Facility Name: LATHAM Well/Facility Number: O-29
 Location QtrQtr: SWSE Section: 29 Township: 5S Range: 96W Meridian: 6
 County: GARFIELD Field Name: GRAND VALLEY
 Federal, Indian or State Lease Number: _____

| | | |
|---------------------|--|--|
| Survey Plat | | |
| Directional Survey | | |
| Srfc Eqpmt Diagram | | |
| Technical Info Page | | |
| Other | | |

CHANGE OF LOCATION OR AS BUILT GPS REPORT

- Change of Location * As-Built GPS Location Report As-Built GPS Location Report with Survey

* Well location change requires new plat. A substantive surface location change may require new Form 2A.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude _____ PDOP Reading _____ Date of Measurement _____
 Longitude _____ GPS Instrument Operator's Name _____

LOCATION CHANGE (all measurements in Feet)

Well will be: _____ (Vertical, Directional, Horizontal)

Change of **Surface** Footage **From** Exterior Section Lines:

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| FNL/FSL | | FEL/FWL | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

Change of **Surface** Footage **To** Exterior Section Lines:

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|

Current **Surface** Location **From** QtrQtr SWSE Sec 29

Twp 5S Range 96W Meridian 6

New **Surface** Location **To** QtrQtr Sec

Twp Range Meridian

Change of **Top of Productive Zone** Footage **From** Exterior Section Lines:

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|

Change of **Top of Productive Zone** Footage **To** Exterior Section Lines:

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | ** |
|----------------------|----------------------|----------------------|----------------------|----|

Current **Top of Productive Zone** Location **From** Sec

Twp Range

New **Top of Productive Zone** Location **To** Sec

Twp Range

Change of **Bottomhole** Footage **From** Exterior Section Lines:

| | | | |
|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|

Change of **Bottomhole** Footage **To** Exterior Section Lines:

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | ** |
|----------------------|----------------------|----------------------|----------------------|----|

Current **Bottomhole** Location Sec Twp

Range ** attach deviated drilling plan

New **Bottomhole** Location Sec Twp

Range

Is location in High Density Area? _____

Distance, in feet, to nearest building _____, public road: _____, above ground utility: _____, railroad: _____,

property line: _____, lease line: _____, well in same formation: _____

Ground Elevation _____ feet Surface owner consultation date _____

OTHER CHANGES

REMOVE FROM SURFACE BOND Signed surface use agreement is a required attachment

CHANGE OF WELL, FACILITY OR OIL & GAS LOCATION NAME OR NUMBER

From: Name LATHAM Number O-29 Effective Date: _____

To: Name _____ Number _____

ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.

WELL: Abandon Application for Permit-to-Drill (Form2) – Well API Number _____ has not been drilled.

PIT: Abandon Earthen Pit Permit (Form 15) – COGCC Pit Facility ID Number _____ has not been constructed (Permitted and constructed pit requires closure per Rule 905)

CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number _____ has not been constructed (Constructed facility requires closure per Rule 908)

OIL & GAS LOCATION ID Number: _____

Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.

Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.

Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.

REQUEST FOR CONFIDENTIAL STATUS

DIGITAL WELL LOG UPLOAD

DOCUMENTS SUBMITTED Purpose of Submission: _____

RECLAMATION

INTERIM RECLAMATION

Interim Reclamation will commence approximately _____

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Interim reclamation complete, site ready for inspection.

Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.

Field inspection will be conducted to document Rule 1003.e. compliance

FINAL RECLAMATION

Final Reclamation will commence approximately _____

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

Field inspection will be conducted to document Rule 1004.c. compliance

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned _____ Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT _____

SPUD DATE: _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

NOTICE OF INTENT Approximate Start Date 11/08/2013

REPORT OF WORK DONE Date Work Completed _____

- Intent to Recomplete (Form 2 also required)
- Request to Vent or Flare
- E&P Waste Mangement Plan
- Change Drilling Plan
- Repair Well
- Beneficial Reuse of E&P Waste
- Gross Interval Change
- Rule 502 variance requested. Must provide detailed info regarding request.
- Other PIT NETTING
- Status Update/Change of Remediation Plans for Spills and Releases

COMMENTS:

Seasonal removal of pit netting.
 Removal of water impoundment netting during winter months (currently underway) due to snow loading and lack of seasonal Sage Grouse habitation. Pit is located at over 8,000 ft. elevation on private land and freezes over during winter months. No free product will accumulate on the pit surface. Nets will be reinstalled before Sage Grouse nesting season begins on March 1st. 8' wildlife fencing around pit will remain intact year round.

H2S REPORTING

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: _____ in ppm (parts per million) Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: _____

COMMENTS:

Best Management Practices

No BMP/COA Type

Description

| | |
|--|--|
| | |
|--|--|

Operator Comments:

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: HEIDI BANG

Title: REG COMPLIANCE ASST Email: HSB@BRY.COM Date: 11/26/2013

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: KUBECZKO, DAVE Date: 2/10/2014

CONDITIONS OF APPROVAL, IF ANY:

COA Type

Description

| | |
|--|--|
| | Netting can be removed during the winter (as requested) as long as the pit is frozen during the winter. If part of the pit does not freeze due to pumping or discharge of produced water into the pit, then that section of the pit must be netted and isolated so that no access to the water is possible for birds and other wildlife. It is the responsibility of the operator to protect wildlife from having access to (unfrozen) water of the pit. |
| | Netting needs to be reinstalled over fluid pits upon thawing of the pits' contents, or no later than 04-01-14. |

General Comments

User Group

Comment

Comment Date

| | | |
|--|--|--|
| | | |
|--|--|--|

Total: 0 comment(s)

Attachment Check List

Att Doc Num

Name

| | |
|-----------|---|
| 2106894 | CPW Concurrence, Seasonal Removal of Wildlife Netting |
| 400518980 | FORM 4 SUBMITTED |

Total Attach: 2 Files

Dave Kubeczko - DNR

From: Dave Kubeczko - DNR
Sent: Monday, February 10, 2014 4:39 PM
To: dave.kubeczko@state.co.us
Subject: FW: Berry Petroleum - Removal of Nets from Fluid Pits
Attachments: Berry pit netting exemption with map SIGNED.pdf

Scan No 2106894 CPW CORRESPONDENCE FOR SEASONAL REMOVAL OF WILDLIFE NETTING AT 9 PIT LOCATIONS FORM 4 SUNDRY NOTICES

From: Taylor Elm - DNR [mailto:taylor.elm@state.co.us]
Sent: Monday, February 10, 2014 4:24 PM
To: Dave Kubeczko - DNR; Bang, Heidi
Cc: JT Romatzke - DNR; Scott Hoyer - DNR; Michael Warren - DNR
Subject: Berry Petroleum - Removal of Nets from Fluid Pits

Dave & Heidi,

Attached is a formal letter from CPW acknowledging Berry Petroleum's sundry notice to remove wildlife netting from the proposed fluid pits. Please let me know if there are any questions or concerns.

Thank you,

Taylor Elm

Land Use Specialist, NW Region
Colorado Parks and Wildlife
0088 Wildlife Way
Glenwood Springs, CO 81601
(970) 947-2971
taylor.elm@state.co.us



COLORADO PARKS & WILDLIFE

NW Regional Service Center
711 Independent Avenue • Grand Junction, Colorado 81505
Phone (970) 255-6100 • FAX (970) 255-6111
wildlife.state.co.us • parks.state.co.us

February 10, 2014

Dave Kubeczko
Colorado Oil & Gas Conservation Commission
796 Megan Avenue, Suite 201
Rifle, CO 81650

**RE: Removal of Fluid Pit Netting During Winter Months for Berry Petroleum
Locations on the Roan Plateau**

Dave,

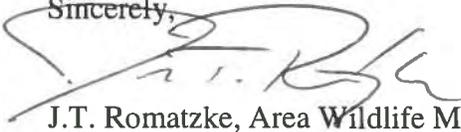
Colorado Parks and Wildlife (CPW) has reviewed the request from Berry Petroleum to remove exclusionary netting from fluid pits during winter months for the following pad locations: Chevron C 19, and I13, Latham O 20, O 32, and I 02, Berry F01, Old Mountain I02, B10, and K15 as shown on the attached map. It is CPW's understanding that nets are to be removed in order to protect them from damage caused by snow and ice buildup.

CPW requests that nets be reinstalled over fluid pits upon thawing of the pits' contents, or by April 1, 2014. Greater sage-grouse lekking activity occurs in this area and pits should be covered while grouse are actively breeding and raising their young. Furthermore, CPW requests notification from the operator when nets are successfully reinstalled at these pad locations in the spring.

CPW requests that any wildlife entrapment in the pits during this open period be reported without delay to CPW staff and that the pit netting reinstalled immediately.

Colorado Parks and Wildlife appreciates the notice on this matter and the opportunity to provide recommendations/comments. If there are any questions regarding these comments or need for further information, please contact Taylor Elm, Land Use Specialist, at (970) 947-2971 or by email at taylor.elm@state.co.us.

Sincerely,



J.T. Romatzke, Area Wildlife Manager

Cc: Heidi Bang, Regulatory Compliance Berry Petroleum
Scott Hoyer, District Wildlife Manager

STATE OF COLORADO

John W. Hickenlooper, Governor • Mike King, Executive Director, Department of Natural Resources
Bob D. Broscheid, Director, Colorado Parks and Wildlife
Parks and Wildlife Commission: Robert W. Bray • Chris Castilian, Secretary • Jeanne Home
Bill Kane, Chair • Gaspar Perricone • James Pribyl • John Singletary
Mark Smith, Vice-Chair • James Vigil • Dean Wingfield • Michelle Zimmerman
Ex Officio Members: Mike King and John Salazar

Michael Warren, NW Region Energy Liaison
File

Attachment: map with pad locations

STATE OF COLORADO

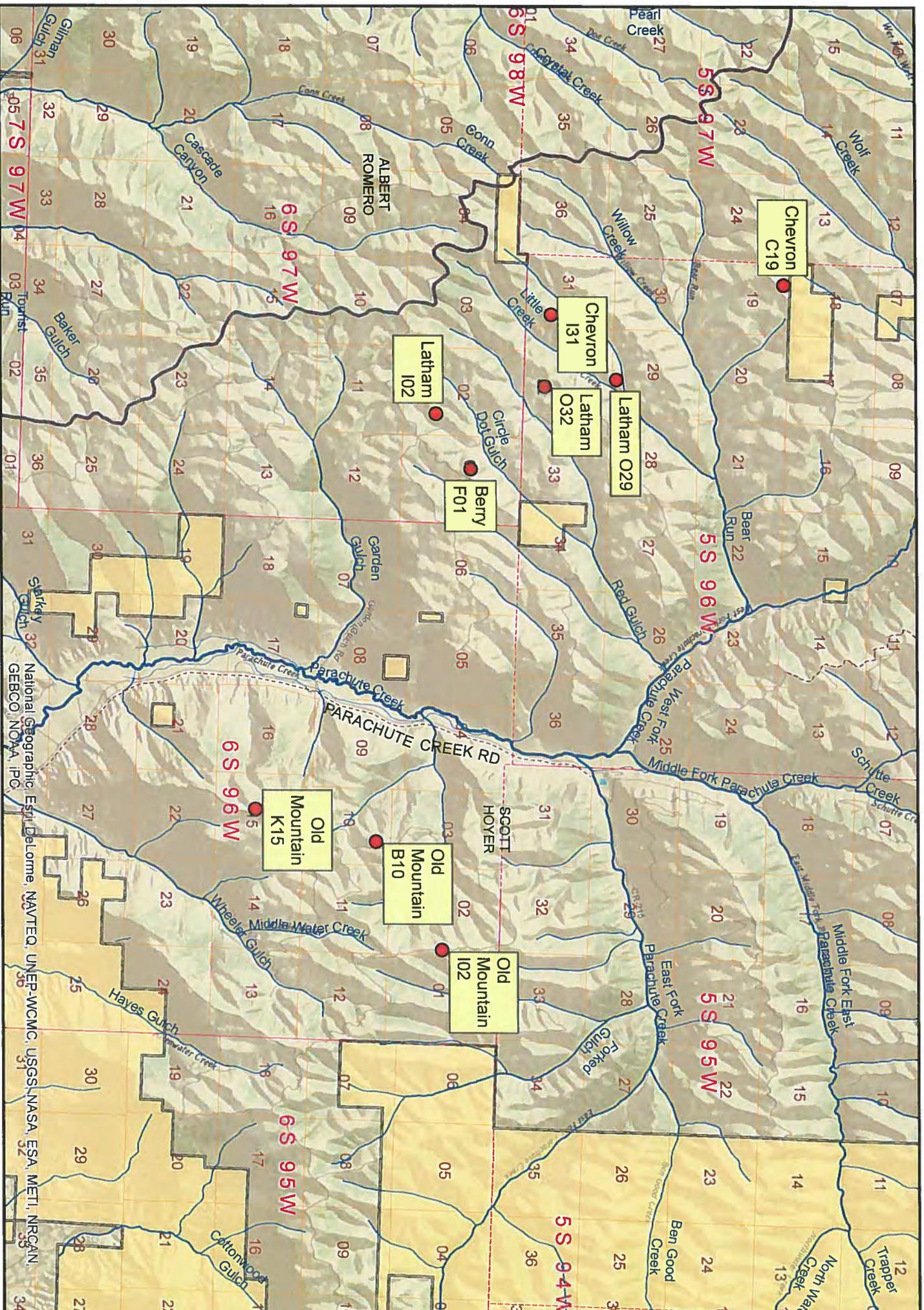
John W. Hickenlooper, Governor • Mike King, Executive Director, Department of Natural Resources

Rick D. Cables, Director, Colorado Parks and Wildlife

Parks and Wildlife Commission: David R. Brougham • Gary Butterworth, Vice-Chair • Chris Castilian
Dorothea Farris • Tim Glenn, Chair • Allan Jones • Bill Kane • Gaspar Perricone • Jim Pribyl • John Singletary

Mark Smith, Secretary • Robert Streeter • Lenna Watson • Dean Wingfield

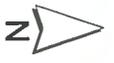
Ex Officio Members: Mike King and John Salazar



Berry Petroleum - Winter Net Removal Locations



- Berry Proposed Net Removal Pits
- BLM Boundaries



National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, IPC

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



FOR OGCC USE ONLY

RECEIVED
1/6/2014

SPILL/RELEASE REPORT

This form is to be submitted by the party responsible for the oil and gas spill or release. Any spill or release which may impact waters of the State must be reported as soon as practicable; any spill over 20 bbls must be reported within 24 hours and all spills over five bbls must be reported within ten days. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

Spill report taken by:

FACILITY ID:

OPERATOR INFORMATION

| | | |
|--|--------------------------------|----------------------------|
| Name of Operator: BERRY PETROLEUM CO | OGCC Operator No: 10091 | Phone Numbers |
| Address: 1999 Broadway, Suite 3700 | | No: (303) 999-4245 |
| City: Denver State: CO Zip: 80202 | | Fax: (303) 999-4345 |
| Contact Person: Bryan Burns, Environmental Specialist | | E-Mail: bob@bry.com |

DESCRIPTION OF SPILL OR RELEASE

| | | |
|--|---|---|
| Date of Incident: 12/26/13 | Facility Name & No.: LATHAM O29 596 | County: Garfield |
| Type of Facility (well, tank battery, flow line, pit): Pipeline | | QtrQtr: SWSE Section: 29 |
| Well Name and Number: LATHAM # 29-26D | | Township: 5S Range: 96W |
| API Number: 05-045-13643 | | Meridian: 6th |
| Specify volume spilled and recovered (in bbls) for the following materials: | | |
| Oil spilled: _____ Oil recov'd: _____ | Water spilled: 30 Water recov'd: 3 | Other spilled: _____ Other recov'd: _____ |
| Ground Water impacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Surface Water impacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Contained within berm? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Area and vertical extent of spill: 20x30 x 10 | |
| Current land use: Oil and Gas Exploration Developmen | Weather conditions: Periodic cloud cover and precipitation | |
| Soil/geology description: Parachute loam, Parachute-Rhomb loams, colluvium derived from sedimentary rock | | |
| IF LESS THAN A MILE, report distance IN FEET to nearest.... Surface water: 392ft wetlands: 392ft buildings: NA | | |
| Livestock: NA water wells: 392ft Depth to shallowest ground water: 450ft | | |
| Cause of spill (e.g., equipment failure, human error, etc.): Equipment Failure | | |
| Detailed description of the spill/release incident: When pumping water, a leak in the six inch line that runs from the can valve up to the O-29 pit was discovered. The line was completely isolated from the main line and immediately blown clear with an air compressor. All valves were then closed and locked with the line being isolated. | | |

CORRECTIVE ACTION

Describe immediate response (how stopped, contained, and recovered):
Within 4 hours the line was shutdown, blown clear, and surface water was cleaned up

Describe any emergency pits constructed:
Temporary liner was installed and soil stockpile placed atop it on O-29 pad

How was the extent of contamination determined:
Excavation and visual inspection

Further remediation activities proposed (attach separate sheet if needed):
After sampling and lab analysis, landfarming will occur on location until soil passes COGCC 910-1 standards.

Describe measures taken to prevent problem from reoccurring:
Replacement of entire line will occur with higher quality material, as well as pipeline pressure testing and chemical treatment where needed

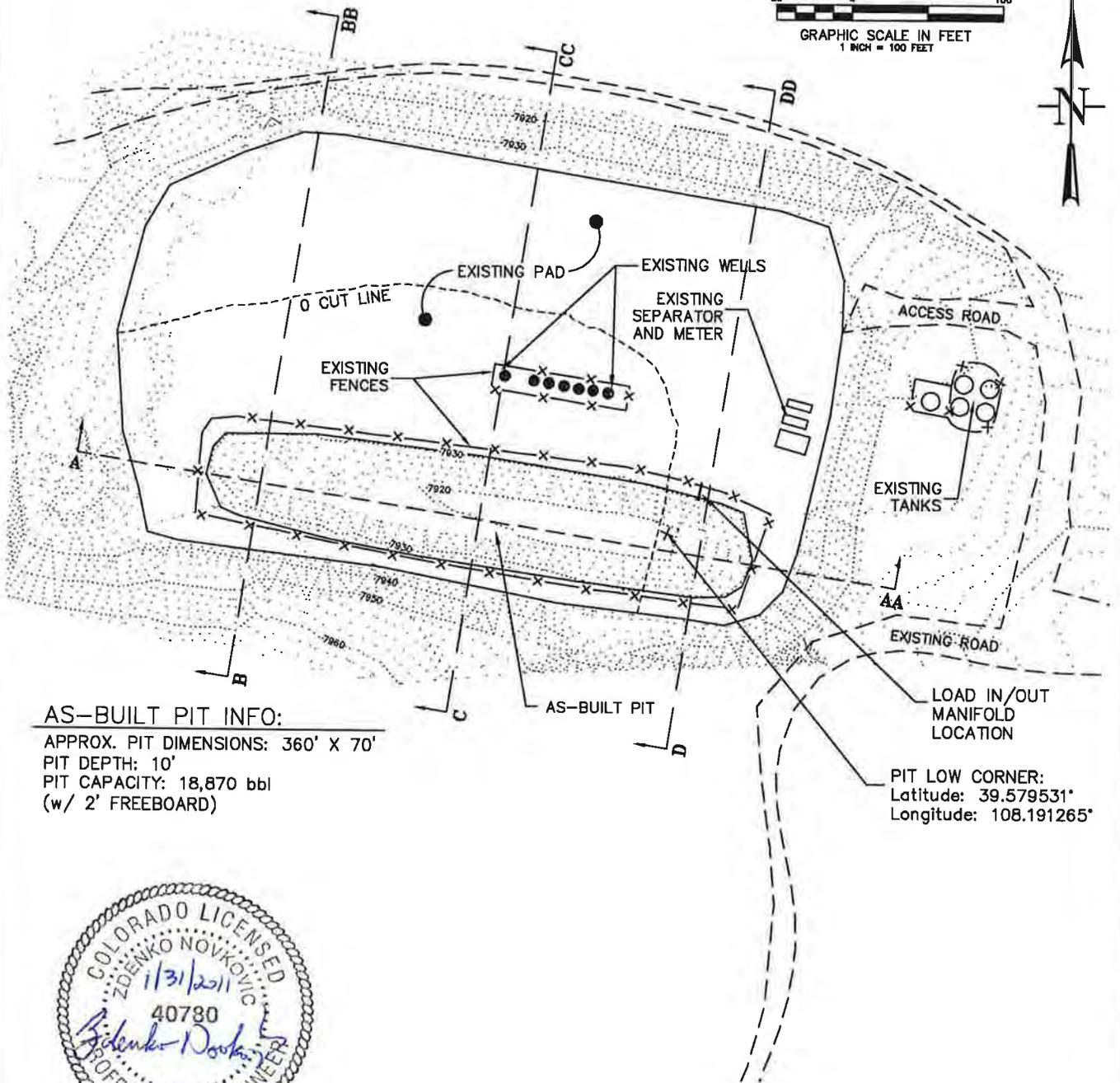
OTHER NOTIFICATIONS

List the parties and agencies notified (County, BLM, EPA, DOT, Local Emergency Planning Coordinator or other).

| Date | Agency | Contact | Phone | Response |
|----------|------------------|--------------------|------------|----------|
| 12-28-13 | COGCC | Carlos Lujan | 9706252497 | NA |
| 12-28-13 | Garfield County | Kirby Wynn | 9709872557 | NA |
| 12-28-13 | Wapiti-landowner | Hollis Bairrington | 3034830044 | NA |
| 12-28-13 | Marathon- Lando | Eric Ward | 9702445735 | NA |
| | | | | |

Spill/Release Tracking No: **2147393**

AS-BUILT PRODUCTION PIT PLAN VIEW



AS-BUILT PIT INFO:

APPROX. PIT DIMENSIONS: 360' X 70'
 PIT DEPTH: 10'
 PIT CAPACITY: 18,870 bbl
 (w/ 2' FREEBOARD)

PIT LOW CORNER:
 Latitude: 39.579531°
 Longitude: 108.191265°



NOTE:
 THE RECOMMENDATIONS PRESENTED WERE PREPARED IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL OPINIONS AND ENGINEERING PRINCIPLES AND PRACTICES. WE MAKE NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED.



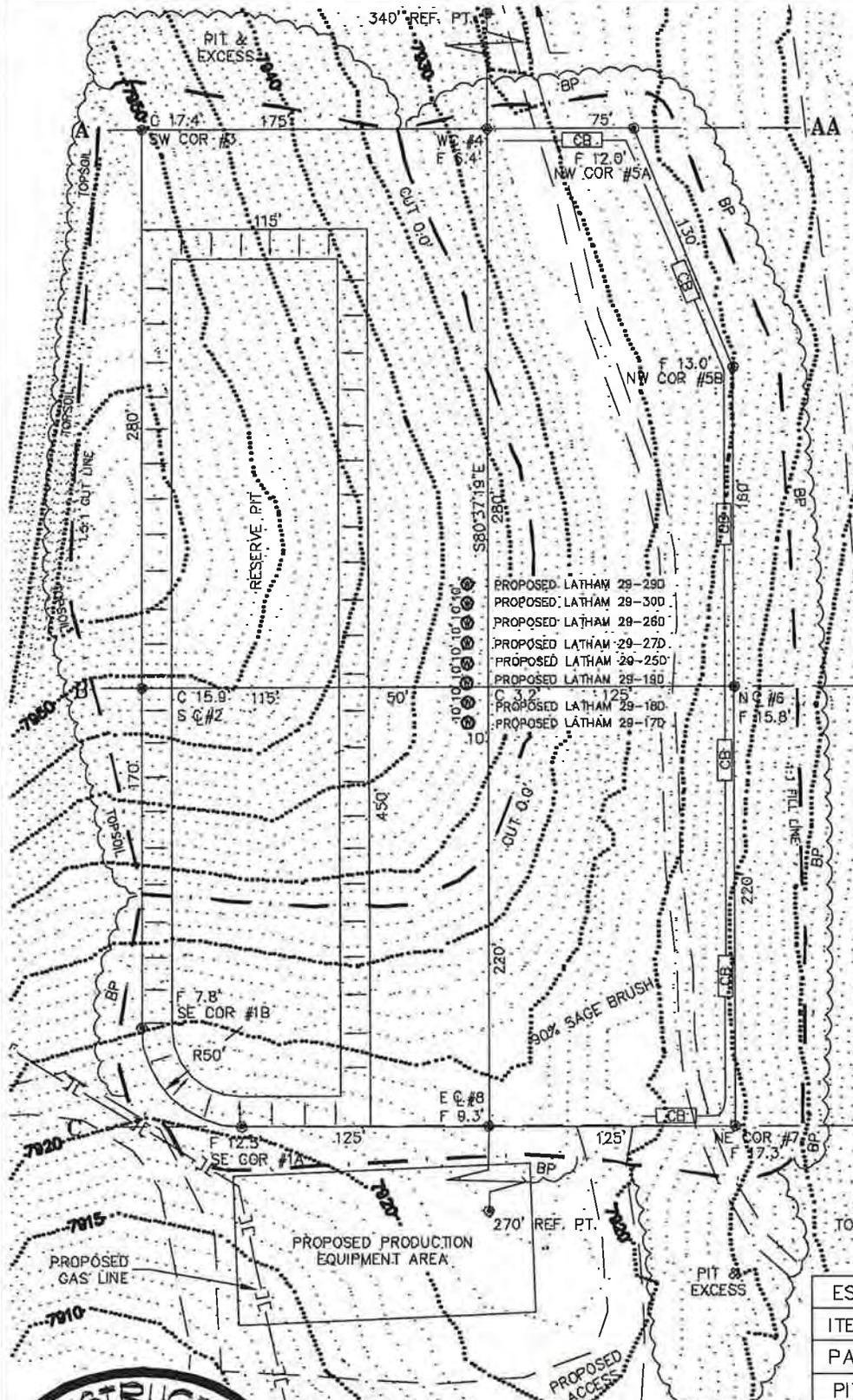
CONSTRUCTION SURVEYS, INC.
 0012 SUNRISE BLVD.
 SILT, CO 81652
 (970)876-5753

Latham 029-596
 SUSE, SECTION 29, T. 5 S., R. 96 W.
BERRY PETROLEUM COMPANY

DATE: 01/31/11

SHEET: 1 OF 2

PLAT #2 PIT & PAD LAYOUT



- PROPOSED LATHAM 29-290
- PROPOSED LATHAM 29-300
- PROPOSED LATHAM 29-260
- PROPOSED LATHAM 29-270
- PROPOSED LATHAM 29-250
- PROPOSED LATHAM 29-190
- PROPOSED LATHAM 29-160
- PROPOSED LATHAM 29-170

LEGEND:
 BP - BRUSH PILE / BARRIER
 CB - CONTAINMENT BERM
 TOTAL DISTURBED AREA = 5.35 AC.

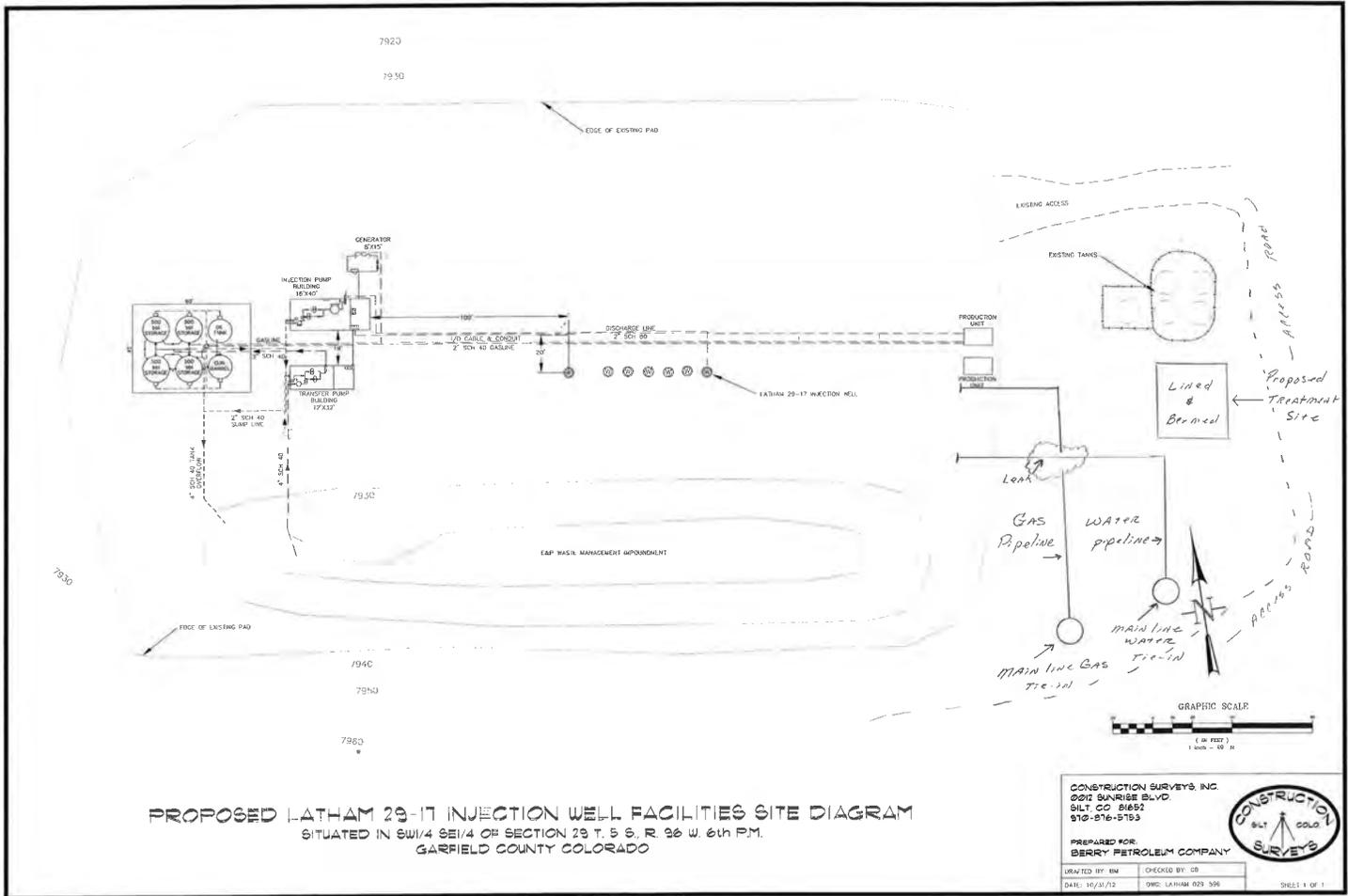
| ESTIMATED DIRT QUANTITIES (YDS) | | | | |
|---------------------------------|-------|-------|---------|--------|
| ITEM | CUT | FILL | TOPSOIL | EXCESS |
| PAD | 32870 | 26820 | 4520 | 1530 |
| PIT | 4320 | | | 4320 |
| TOTALS | 37190 | 26820 | 4520 | 5850 |



CONSTRUCTION SURVEYS, INC.
 0012 SUNRISE BLYD.
 SILT, CO 81652
 (970)876-5753

029

REVISED: 5/22/08
 BERRY PETROLEUM
 COMPANY



PROPOSED LATHAM 29-17 INJECTION WELL FACILITIES SITE DIAGRAM
 SITUATED IN SW1/4 SE1/4 OR SECTION 29 T. 5 S., R. 26 W. 6th P.M.
 GARFIELD COUNTY COLORADO

CONSTRUCTION SURVEYS INC.
 2012 SUNRISE BLVD.
 SALT CO 81652
 970-576-5153

PREPARED FOR:
BERRY PETROLEUM COMPANY

| | |
|-----------------|-------------------------|
| DESIGNED BY: EM | CHECKED BY: CR |
| DATE: 10/15/12 | DRAWN: LATHAM 29-17 306 |

CONSTRUCTION SURVEYS
 SALT CO. COLORADO

SHEET 1 OF 1

5/10/07



01433637

FORM 15 Rev 6/99

State of Colorado Oil and Gas Conservation Commission



FOR OGCC USE ONLY

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax (303)894-2109

EARTHEN PIT REPORT/PERMIT

This form is to be used for both reporting and permitting pits Rule 903 describes when a Permit with prior approval, or a Report within 30 days, is required for pits Submit required attachments and forms

Complete the Attachment Checklist

Oper OGCC

FORM SUBMITTED FOR:

Pit Report Pit Permit

| | | |
|-----------------------------|--|--|
| Detailed Site Plan | | |
| Topo Map w/ Pit Location | | |
| Water Analysis (Form 25) | | |
| Source Wells (Form 26) | | |
| Pit Design/Plan & Cross Sec | | |
| Design Calculations | | |
| Sensitive Area Determ | | |
| Mud Program | | |
| Form 2A | | |

OGCC Operator Number 10091
 Name of Operator BERRY PETROLEUM COMPANY
 Address 950 17TH STREET, SUITE 2400
 City DENVER State CO Zip _____

Contact Name and Telephone
Linda Pavelka
 No 303-633-1852
 Fax 303-825-3350

API Number (of associated well) 045-13648-00 OGCC Facility ID (of other associated facility) _____
 Pit Location (QtrQtr, Sec, Twp, Rng, Meridian) SESW, SEC 29, T5S, R96W
 Latitude 39 580278 Longitude 108 193080 County GARFIELD
 Pit Use Production Drilling (Attach mud program) Special Purpose (Describe Use) FRAC PIT
 Pit Type Lined Unlined Surface Discharge Permit Yes No
 Offsite disposal of pit contents Injection Commercial Pit/Facility Name _____ Pit/Facility No _____
Attach Form 26 to identify Source Wells and Form 25 to provide Produced Water Analysis results

Existing Site Conditions

Is the location in a "Sensitive Area?" Yes No Attach data used for determination.
 Distance (in feet) to nearest surface water 300 ground water 0 water wells N/A
LAND USE (or attach copy of Form 2A if previously submitted for associated well) Select one which best describes land use
 Crop Land Irrigated Dry Land Improved Pasture Hay Meadow CRP
 Non-Crop Land Rangeland Timber Recreational Other (describe) _____
 Subdivided Industrial Commercial Residential
SOILS (or attach copy of Form 2A if previously submitted for associated well)
 Soil map units from USNRCS survey Sheet No _____ Soil Complex/Series No _____
 Soils Series Name _____ Horizon thickness (in inches) A _____, B _____, C _____
 Soils Series Name _____ Horizon thickness (in inches) A _____, B _____, C _____
Attach detailed site plan and topo map with pit location

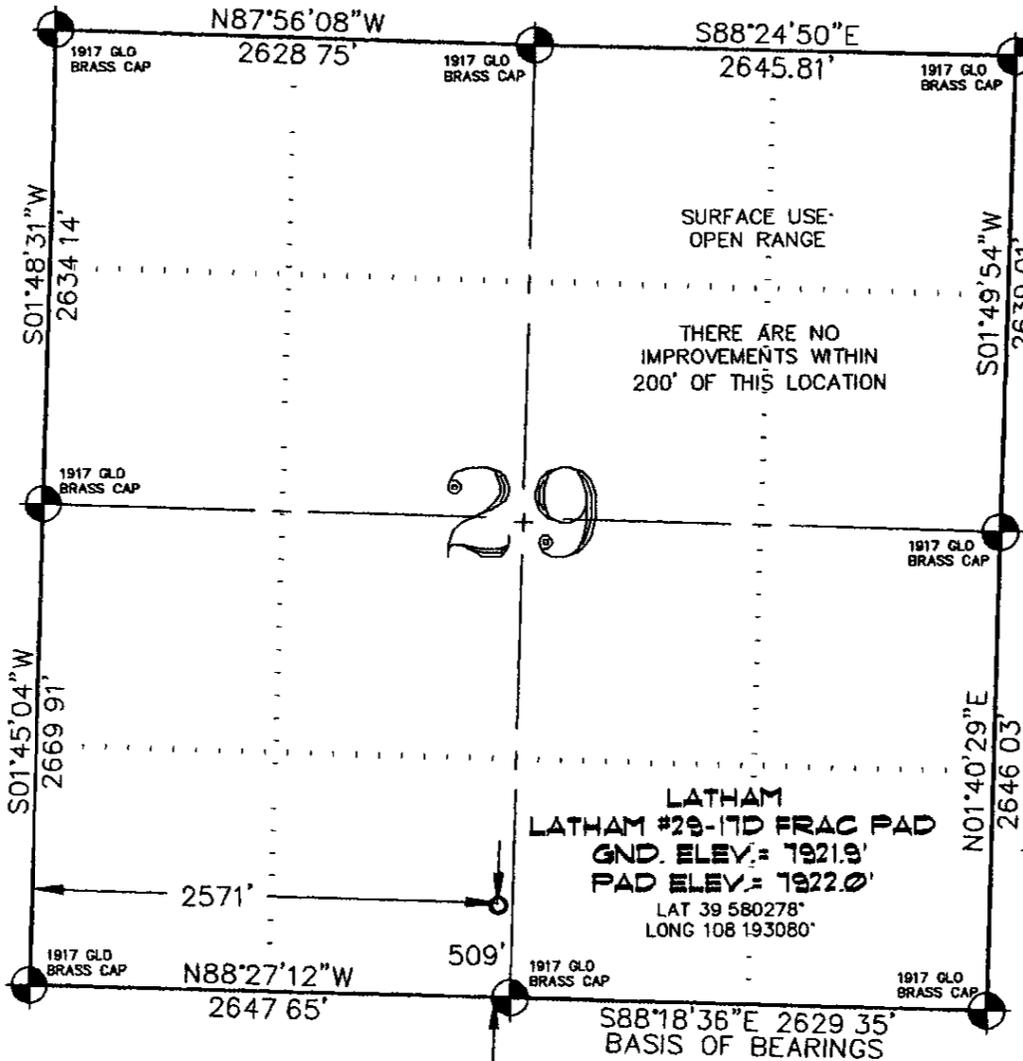
Pit Design and Construction

Size of pit (feet) Length 155' Width 350' Depth 10'
 Calculated pit volume (bbls) 96,616 Daily inflow rate (bbls/day) _____
 Daily disposal rates (attach calculations) Evaporation N/A bbls/day Percolation _____ bbls/day
 Type of liner material POLY LINER Thickness 12 MIL
Attach description of proposed design and construction (include sketches and calculations)
 Method of treatment of produced water prior to discharge into pit (separator, heater treater, other) TRUCK
 Is pit fenced? Yes No Is pit netted? Yes No

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete
 Print Name LINDA PAVELKA Signed _____
 Title REGULATORY Date 5/9/2007
 OGCC Approved [Signature] Title EPS Date 5/10/07
 CONDITIONS OF APPROVAL, IF ANY **FACILITY NUMBER: 290544**

SEC. 29, T. 5 S., R. 96 W. OF THE 6TH P.M.

PLAT #1
LOCATION PLAT



- LEGEND-**
- SECTION CORNER LOCATION BASED ON GLO RECORD INFORMATION
 - FIELD SURVEYED SECTION CORNER LOCATIONS
 - FIELD SURVEYED PAD LOCATION

LATHAM
LATHAM #29-17D FRAC PAD
GND. ELEV.: 7921.9'
PAD ELEV.: 7922.0'
 LAT 39 580278"
 LONG 108 193080"

THIS WELL LOCATION PLAT WAS PREPARED FOR BERRY PETROLEUM COMPANY, TO LOCATE THE LATHAM #29-17D FRAC PAD, 509 FEET FROM THE SOUTH LINE AND 2571 FEET FROM THE WEST LINE IN THE SE1/4 SW1/4 OF SECTION 29, T. 5 S., R. 96 W. OF THE 6TH P.M. GARFIELD COUNTY, COLORADO.

REFERENCE NOTES

- 1) T 5 S, R 96 W, 6TH P.M GLO PLAT
- 2) U.S.G.S QUAD C1RLCE DOT CULCH, CO
- 3) ELEVATIONS BASED ON N A V.D. 1988
- 4) LATITUDES AND LONGITUDES ARE BASED ON NAD 83, COLORADO CENTRAL ZONE
- 5) GPS OPERATOR ROBERT WOOD, OBSERVED A PPOF OF 2.5
- 6) ALL GPS OBSERVATIONS ARE IN COMPLIANCE WITH COGCC RULE NO 215
- 7) SURFACE AND BOTTOM HOLE LOCATIONS ARE MEASURED 90° FROM SECTION LINES

SURVEYOR'S CERTIFICATE

I, Steven R Pace a Professional Land Surveyor in the State of Colorado do hereby certify that this Survey was made under my direct supervision, and that this Plat was prepared by me or under my direct supervision.

Steven R Pace

COLORADO P L S 22580



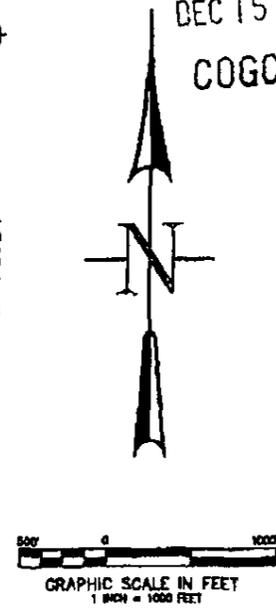
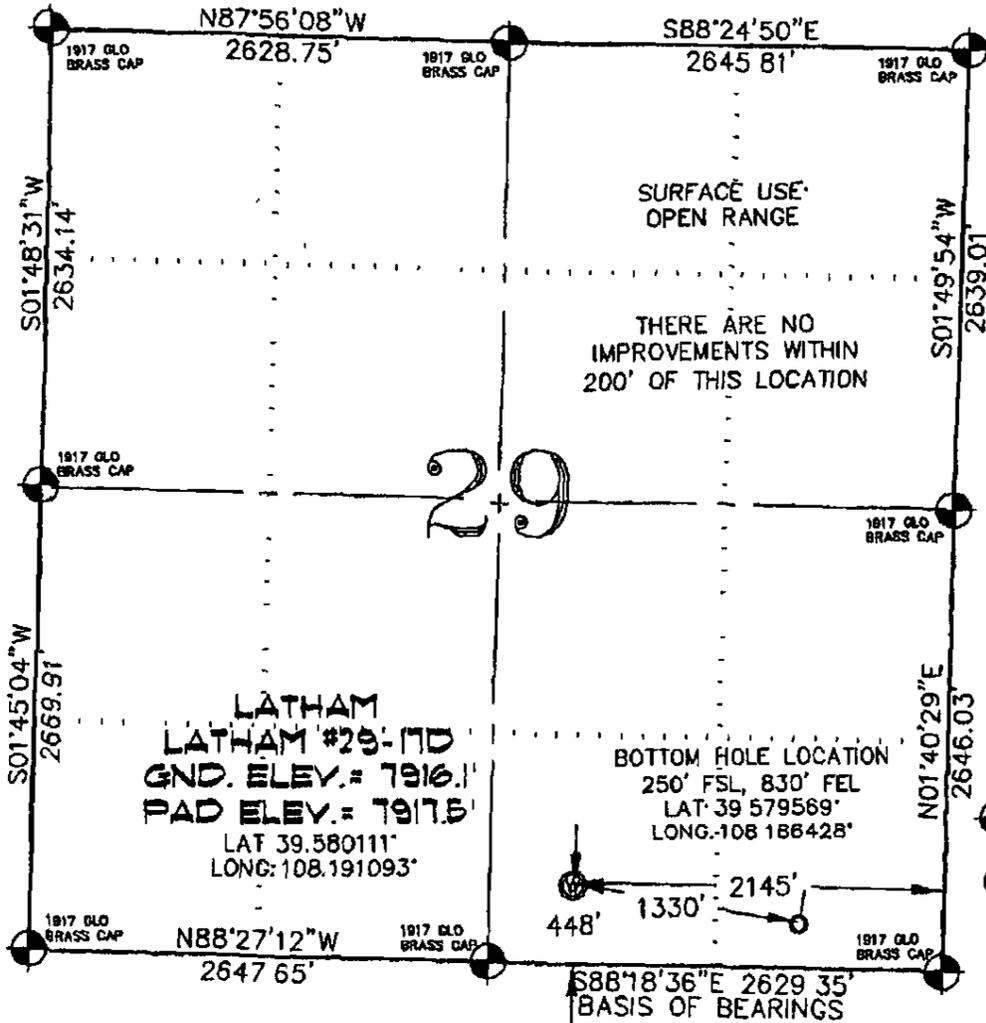
CONSTRUCTION SURVEYS, INC.
 0012 SUNRISE BLVD.
 SILT, CO 81652
 (970)876-5753

| | | | |
|----------|----------|-------|------------------|
| SURVEYED | 04/09/07 | SCALE | 1" = 1000' |
| DRAFTED | 05/07/07 | DWG | ORION\CHEV27-17D |
| CHECKED | 05/08/07 | SHEET | 1 of 2 |

01722311

SEC. 29, T. 5 S., R. 96 W. OF THE 6TH P.M.

PLAT RECEIVED
LOCATION PLAT
DEC 15 06
COGCC



- LEGEND-**
- SECTION CORNER LOCATION BASED ON GLO RECORD INFORMATION
 - ⊙ FIELD SURVEYED SECTION CORNER LOCATIONS
 - ⊙ FIELD SURVEYED WELL LOCATION
 - CALCULATED BOTTOM HOLE LOCATION

LATHAM
LATHAM #29-17D
GND. ELEV. = 7916.1'
PAD ELEV. = 7917.5'
LAT 39.580111°
LONG: 108.191093°

BOTTOM HOLE LOCATION
250' FSL, 830' FEL
LAT 39 579569°
LONG: 108 186428°

THIS WELL LOCATION PLAT WAS PREPARED FOR BERRY PETROLEUM COMPANY, TO LOCATE THE LATHAM #29-17D WELL, 448 FEET FROM THE SOUTH LINE AND 2145 FEET FROM THE EAST LINE IN THE SW1/4 SE1/4 OF SECTION 29, T. 5 S., R. 96 W. OF THE 6TH P.M. GARFIELD COUNTY, COLORADO.

REFERENCE NOTES

- 1) T. 5 S., R. 96 W., 6TH P.M. GLO PLAT
- 2) U.S.G.S. QUAD: CIRLCE DOT GULCH, CO
- 3) ELEVATIONS BASED ON N A V D 1988
- 4) LATITUDES AND LONGITUDES ARE BASED ON NAD 83, COLORADO CENTRAL ZONE.
- 5) GPS OPERATOR ROBERT WOOD, OBSERVED A POOP OF 2.2
- 6) ALL GPS OBSERVATIONS ARE IN COMPLIANCE WITH COGCC RULE NO 215
- 7) SURFACE AND BOTTOM HOLE LOCATIONS ARE MEASURED 80' FROM SECTION LINES.

SURVEYOR'S CERTIFICATE

I, Steven R. Pace, a Professional Land Surveyor in the State of Colorado do hereby certify that this plat was prepared under my direct supervision, and that this Plat is a true and correct Survey.

Steven R. Pace
22580
E-1-06
PROFESSIONAL LAND SURVEYOR

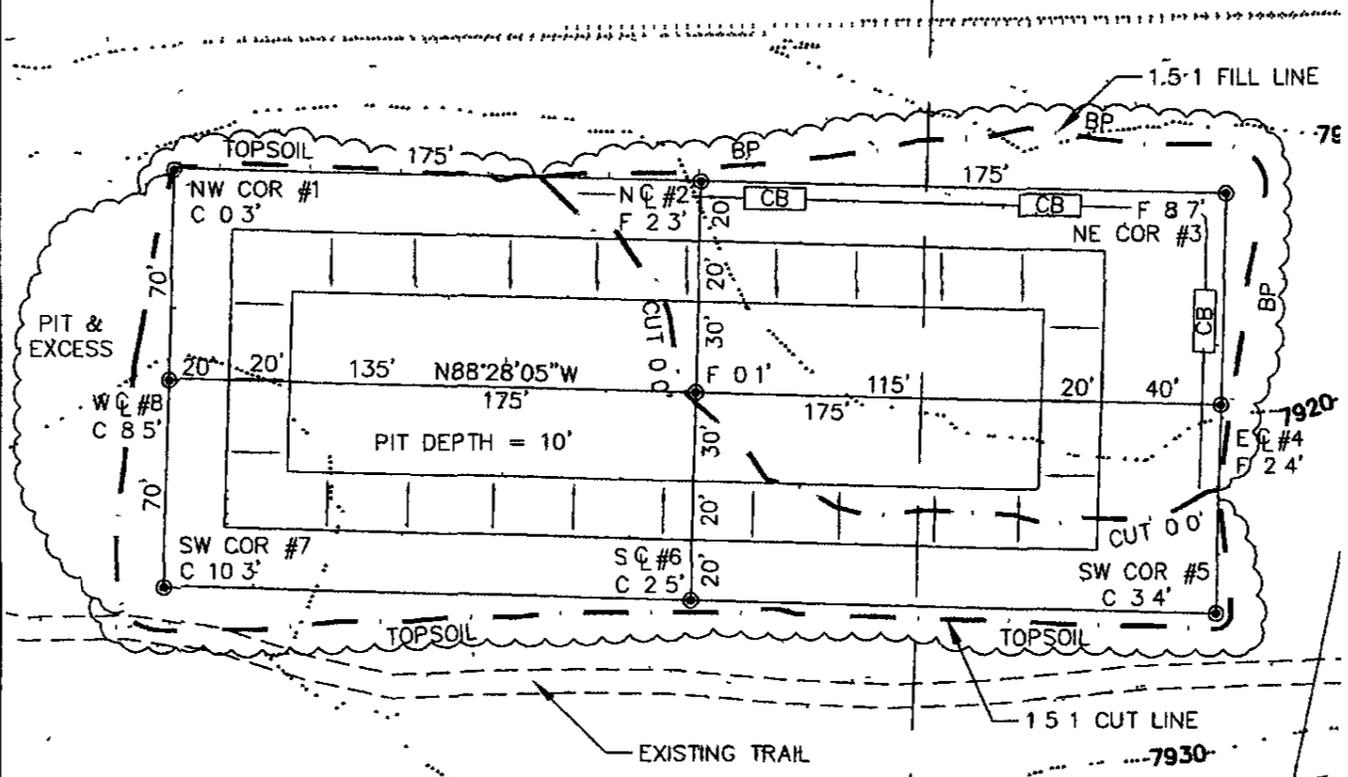
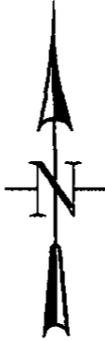


CONSTRUCTION SURVEYS, INC.
2012 SUNRISE BLVD.
BILT, CO 81652
(970)876-5753

| | |
|--------------------|----------------------|
| SURVEYED: 07/21/06 | SCALE 1" = 1000' |
| DRAFTED: 07/28/06 | DWG ORION\CHEV32-19D |
| CHECKED: 07/31/06 | SHEET 1 of 9 |

045-13648-00

PLAT #2 PIT & PAD LAYOUT



LEGEND
 BP - BRUSH PILE/BARRIER
 CB - CONTAINMENT BERM
 TOTAL DISTURBED AREA = 1.55 AC

PROPOSED LATHAM
29-17D PAD

| ESTIMATED FRAC DIRT QUANTITIES (YDS) | | | | |
|--------------------------------------|--------------|-------------|-------------|-------------|
| ITEM | CUT | FILL | TOPSOIL | EXCESS |
| PAD | 4784 | 2848 | 1388 | 548 |
| PIT | 7800 | | | 7800 |
| TOTALS | 12584 | 2848 | 1388 | 8348 |



CONSTRUCTION SURVEYS, INC.
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