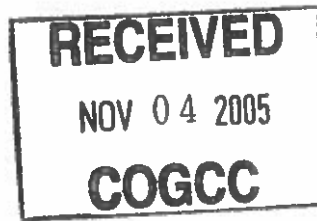


October 28, 2005

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln St., Suite 801
Denver, CO 80203



RE: Rediess Tank Battery / Earthen Pits

Dear Mr. Ferguson,

In compliance with the rules set by the State of Colorado, as of September 30, 2005 Magpie ceased all discharge of produced water into pits identified by permit #'s 101099, 101100, and 101101. We have been advised these pits no longer have approval within a sensitive area. These pits were approved and permitted prior to the adoption of the 900 Series rules for E&P Waste Management. On August 18, 2005, with landowner approval, representatives from Magpie met with Randall H. Ferguson to collect samples from the Rediess well and agricultural water well/ windmill. These samples were submitted for analysis. Results were entered into HydroChem. The Stiff and Piper diagrams demonstrate that Rouse water well has not been impacted by the produced water from the earthen pits and the Rediess pit does not exceed standards in the Agricultural Water Supply Table. However, the laboratory results show the produced water exceeds certain ground water quality standards for Domestic Use. The Rediess pit does exceed the CDPHE Standard for benzene in the Ground Water – Organic Chemical Standards Table. Based on these findings, with concern to the rules set by COGCC, Magpie has made the following plans for operation of the Rediess Lease.

- Pit evacuation with E&P waste disposed of in accordance with Rule 907. Specifically, with landowner approval, the oily waste is to be removed and treated onsite with nitrogen until standards meet allowable concentrations.
- Closure of existing pits in accordance with Rule 905. (See attached Form 27's)
- Installation of pipeline to a point specified on map described as NENW, Sec19, T1N, R56W. This point is approximately 700 feet south of the Rediess # 2 and is not within the specified sensitive area.
- Here, two earthen pits will be constructed to accommodate water disposal. Permits are enclosed. Landowner has been notified.
- This project's estimated completion date is June 1, 2006. This date is based upon material and labor cost and availability, weather and final approval from the COGCC and landowner.

- The Rediess lease will resume production.

Should you have any questions, I may be reached at (970) 669-6308.

Respectfully,

A handwritten signature in black ink, appearing to read "Ryan J. Warner", with a long horizontal flourish extending to the right.

Ryan J. Warner
Associate Director of Operations

Attachments

Cc. Kevin Lively
Brian Macke
Debbie Baldwin
Richard Olona Esq.



State of Colorado

Oil and Gas Conservation Commission

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



RECEIVED

NOV 04 2005

COGCC

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Unlined Pit Closure

OGCC Operator Number: <u>52530</u>	Contact Name and Telephone: <u>Ryan Warner</u>
Name of Operator: <u>Magpie Operating Inc</u>	No: <u>(970) 669-6308</u>
Address: <u>2707 South County Road 11</u>	Fax: <u>(970) 669-6396</u>
City: <u>Loveland</u> State: <u>CO</u> Zip: <u>80537</u>	
API Number: <u>0508707173</u>	County: <u>Morgan</u>
Facility Name: <u>Rediess</u>	Facility Number: <u>101099</u>
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESW 18 1N 56W</u> Latitude: <u>40.049915</u> Longitude: <u>-103.690362</u>	

TECHNICAL CONDITIONS

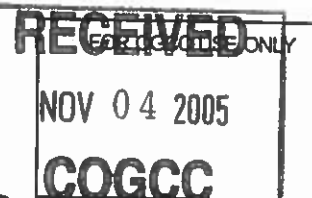
Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): <u>produced water</u>		
Site Conditions: Is location within a sensitive area (according to Rule 901e)? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If yes, attach evaluation.		
Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): <u>rang land, grazing cattle</u>		
Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____		
Potential receptors (water wells within 1/4 mi, surface waters, etc.): <u>Rouse water well</u>		
Description of Impact (if previously provided, refer to that form or document):		
Impacted Media (check):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>moderate in inned. area</u>	<u>lab analysis</u>
<input type="checkbox"/> Vegetation	_____	_____
<input checked="" type="checkbox"/> Groundwater	<u>minimal</u>	<u>lab analysis</u>
<input type="checkbox"/> Surface Water	_____	_____

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document): <u>Remove oily waste</u>	
Describe how source is to be removed: <u>dug up</u>	
Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.: <u>treated on site w/ nitrogen</u>	

State of Colorado
Oil and Gas Conservation Commission

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



SOURCE OF PRODUCED WATER FOR DISPOSAL

This form must be completed for any new disposal site and for any change in sources of produced water for an existing disposal site.

Complete the
Attachment Checklist

OGCC Operator Number: <u>52530</u>	Contact Name and Telephone: <u>Ryan Warner</u>
Name of Operator: <u>Maggie Operating Inc</u>	No: <u>970 669-6308</u>
Address: <u>2707 South County Road 11</u>	Fax: <u>970 669-6396</u>
City: <u>Loveland</u> State: <u>CO</u> Zip: <u>80537</u>	

OGCC Disposal Facility Number: _____

Operator's Disposal Facility Name: _____ Operator's Disposal Facility Number: _____

Location (QtrQtr, Sec, Twp, Rng, Meridian): _____

Address: _____

City: _____ State: _____ Zip: _____ County: _____

Chemical Analysis of fluid	Oper OGCC
X	

If more space is required,
attach additional sheet.

Add Source: OGCC Lease No: 42693 API No: 05-087-07160 Well Name & No: Redress 1
☒ Operator Name: Maggie Operating Inc Operator No: 52530
Delete Source: Location: QtrQtr: NESW Section: 18 Township: 1N Range: 56W Producing Formation: J Sand
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

Add Source: OGCC Lease No: 42693 API No: 05-087-07173 Well Name & No: Redress 2
☒ Operator Name: Maggie Operating Inc Operator No: 52530
Delete Source: Location: QtrQtr: SESW Section: 18 Township: 1N Range: 56W Producing Formation: J Sand
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

Add Source: OGCC Lease No: _____ API No: _____ Well Name & No: _____
☐ Operator Name: _____ Operator No: _____
Delete Source: Location: QtrQtr: _____ Section: _____ Township: _____ Range: _____ Producing Formation: _____
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

Add Source: OGCC Lease No: _____ API No: _____ Well Name & No: _____
☐ Operator Name: _____ Operator No: _____
Delete Source: Location: QtrQtr: _____ Section: _____ Township: _____ Range: _____ Producing Formation: _____
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

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Add Source: OGCC Lease No: _____ API No: _____ Well Name & No: _____
☐ Operator Name: _____ Operator No: _____
Delete Source: Location: QtrQtr: _____ Section: _____ Township: _____ Range: _____ Producing Formation: _____
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

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

Print Name: Ryan Warner

Signed: Ryan Warner

Title: _____

Date: 10/28/05

OGCC Approved: _____

Title: _____

Date: _____

CONDITIONS OF APPROVAL, IF ANY:

State of Colorado
Oil and Gas Conservation Commission

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.



FORM SUBMITTED FOR:

☐ Pit Report

☒ Pit Permit

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

OGCC Operator Number: 52530
Name of Operator: Magpie Operating Inc
Address: 2707 South County Rd 11
City: Loveland State: CO Zip: 80537

Contact Name and Telephone:
Ryan Warner
No: (970) 665-6308
Fax: (970) 665-6396

API Number (of associated well): 05-087-07173 OGCC Facility ID (of other associated facility): 42695

Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW 19 IN SWW

Latitude: 40.044429 Longitude: -103.690362 County: Morgan

Pit Use: ☒ Production ☐ Drilling (Attach mud program) ☐ Special Purpose (Describe Use): _____

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: 9500 ft ground water: _____ water wells: 2700 ft

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: C0087 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: 200 Width: 75 Depth: 8

Calculated pit volume (bbls): 21371 Daily inflow rate (bbls/day): 150

Daily disposal rates (attach calculations): Evaporation: 5 bbls/day Percolation: >600 bbls/day

Type of liner material: _____ Thickness: _____

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): _____

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: Ryan Warner Signed: Ryan Warner

Title: _____ Date: 10/28/05

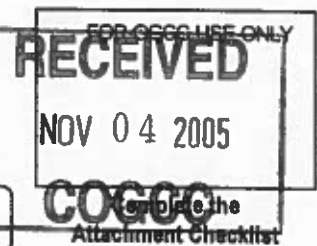
OGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

FACILITY NUMBER:

State of Colorado
Oil and Gas Conservation Commission

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



SOURCE OF PRODUCED WATER FOR DISPOSAL

This form must be completed for any new disposal site and for any change in sources of produced water for an existing disposal site.

OGCC Operator Number: 52530
Name of Operator: Maggie Operating Inc
Address: 2707 South County Road 11
City: Loveland State: CO Zip: 80537

Contact Name and Telephone:
Ryan Warner
No: 970 669-6308
Fax: 970 669-6396

OGCC	
Chemical Analysis of fluid	<input checked="" type="checkbox"/>

OGCC Disposal Facility Number: _____
Operator's Disposal Facility Name: _____ Operator's Disposal Facility Number: _____
Location (QtrQtr, Sec, Twp, Rng, Meridian): _____
Address: _____
City: _____ State: _____ Zip: _____ County: _____

If more space is required,
attach additional sheet.

Add Source: OGCC Lease No: 42693 API No: 05-087-07160 Well Name & No: Redress 1
☒ Operator Name: Maggie Operating Inc Operator No: 52530
Delete Source: Location: QtrQtr: NESW Section: 18 Township: 1N Range: 56W Producing Formation: J Sand
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

Add Source: OGCC Lease No: 42693 API No: 05-087-07173 Well Name & No: Redress 2
☒ Operator Name: Maggie Operating Inc Operator No: 52530
Delete Source: Location: QtrQtr: SESW Section: 18 Township: 1N Range: 56W Producing Formation: J Sand
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

Add Source: OGCC Lease No: _____ API No: _____ Well Name & No: _____
☐ Operator Name: _____ Operator No: _____
Delete Source: Location: QtrQtr: _____ Section: _____ Township: _____ Range: _____ Producing Formation: _____
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

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☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☐ Pipeline ☐ Truck TDS: _____

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Print Name: Ryan Warner

Signed: Ryan Warner

Title: _____ Date: 10/28/05

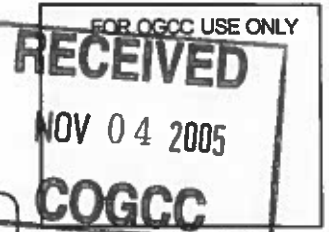
OGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

State of Colorado

Oil and Gas Conservation Commission

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

FORM SUBMITTED FOR:

☐ Pit Report☒ Pit Permit

Oper OGCC

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

OGCC Operator Number: 52530Name of Operator: Magpie Operating IncAddress: 2707 South County Rd 11City: Loveland State: CO Zip: 80537

Contact Name and Telephone:

Ryan WarnerNo: (970) 665-6308Fax: (970) 665-6390API Number (of associated well): 05-087-07173 OGCC Facility ID (of other associated facility): 42693Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW 19 1N S6WLatitude: 40.044429 Longitude: -103.690362 County: MorganPit Use: ☒ Production ☐ Drilling (Attach mud program) ☐ Special Purpose (Describe Use):Pit Type: ☐ Lined ☒ Unlined Surface Discharge Permit: ☐ Yes ☒ NoOffsite 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: 9500ft ground water: water wells: 2700ft

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 ☐ CRPNon-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: C0087 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: 200 Width: 75 Depth: 8Calculated pit volume (bbls): 21371 Daily inflow rate (bbls/day): 150Daily disposal rates (attach calculations): Evaporation: 5 bbls/day Percolation: >600 bbls/day

Type of liner material: Thickness:

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):

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: Ryan WarnerSigned: Ryan WarnerTitle: Date: 10/28/05

OGCC Approved: Title: Date:

CONDITIONS OF APPROVAL, IF ANY:

FACILITY NUMBER:

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

RECEIVED

Client Project ID
Collection Date: 8/18/05

Lab Order: 05-6159
Date Received: 8/22/05
Units: $\mu\text{mhos/cm}$

NOV 04 2005

60666

Specific Conductance @ 25°C
Specific Conductance

Method: SM2510 B

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LOL	DF
05-6159-01C	Redeiss Produced Water	Groundwater	8/23/05	8/23/05	8080	1.00	1
05-6159-02C	Redeiss Produced Treated Water	Groundwater	8/23/05	8/23/05	9350	1.00	1
05-6159-03C	Rouse Water Well	Groundwater	8/23/05	8/23/05	5350	1.00	1

Comments


Analyst


Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 8/31/05

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

RECEIVED

NOV 04 2005

COGCC

Client Project ID
Collection Date: 8/18/05 1210

Lab Order: 05-6159
Date Received: 8/22/05
Units: pH Units

pH

Method: E150.1

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
05-6159-01C	Redeiss Produced Water	Groundwater	8/22/05	8/22/05 0000	7.93	1.00	1
05-6159-02C	Redeiss Produced Treated Water	Groundwater	8/22/05	8/22/05 0000	8.91	1.00	1
05-6159-03C	Rouse Water Well	Groundwater	8/22/05	8/22/05 0000	7.29	1.00	1

Comments



Analyst



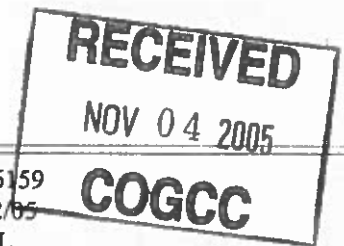
Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
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Definitions: DF - Dilution Factor
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Print Date: 8/31/05

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021



Client Project ID
Collection Date: 8/18/05 1210

Lab Order: 05-6159
Date Received: 8/22/05
Units: mg/L

Total Dissolved Solids (TDS)
Total Dissolved Solids

Method: SM 2540C

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
05-6159-01C	Redeiss Produced Water	Groundwater	8/24/05	8/25/05 0000	5560	10.0	1
05-6159-02C	Redeiss Produced Treated Water	Groundwater	8/24/05	8/25/05 0000	6480	10.0	1
05-6159-03C	Rouse Water Well	Groundwater	8/24/05	8/25/05 0000	5280	10.0	1

Comments

Analyst

Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
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X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 8/31/05

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

RECEIVED

Client Project ID
Collection Date: 8/18/05

Lab Order: 05-6159
Date Received: 8/21/05
Units: mg/L CaCO₃

NOV 04 2005

GOGCC

Alkalinity
Carbonate

Method: SM2320B

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
05-6159-01E	Redeiss Produced Water	Groundwater	8/29/05	8/29/05	U	5.0	1
05-6159-02E	Redeiss Produced Treated Water	Groundwater	8/26/05	8/26/05	U	5.0	1
05-6159-03E	Rouse Water Well	Groundwater	8/26/05	8/26/05	U	5.0	1

Comments


Analyst


Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 8/31/05

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

RECEIVED

NOV 04 2005

COGCC

Client Project ID
Collection Date: 8/18/05

Lab Order: 05-6159
Date Received: 8/27/05
Units: mg/L CaCO₃

Alkalinity
Bicarbonate

Method: SM2320B

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
05-6159-01E	Redeiss Produced Water	Groundwater	8/29/05	8/29/05	2250	5.0	1
05-6159-02E	Redeiss Produced Treated Water	Groundwater	8/26/05	8/26/05	U	5.0	1
05-6159-03E	Rouse Water Well	Groundwater	8/26/05	8/26/05	223	5.0	1

Comments



Analyst



Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

Print Date: 8/31/05

Evergreen Analytical, Inc.
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

RECEIVED

NOV 04 2005

Client Project ID
Collection Date: 8/18/05

Lab Order: 05-6159
Date Received: 8/22/05
Units: mg/L CaCO₃

COGCC

Alkalinity
Total Alkalinity

Method: SM2320B

Prep Method:

Lab ID	Client ID	Matrix	Date Prepared	Date Analyzed	Results	LQL	DF
05-6159-01E	Redeiss Produced Water	Groundwater	8/29/05	8/29/05	2250	5.0	1
05-6159-02E	Redeiss Produced Treated Water	Groundwater	8/26/05	8/26/05	191	5.0	1
05-6159-03E	Rouse Water Well	Groundwater	8/26/05	8/26/05	223	5.0	1

Comments



Analyst



Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL
H - Sample exceeded analytical holding time
U - Compound analyzed for but not detected
X - See case narrative

Definitions: DF - Dilution Factor
LQL - Lower Quantitation Limit

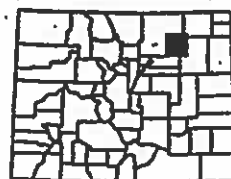
Print Date: 8/31/05

SPECIFIED AREA FOR BRUSH WELLFIELD
TOWNSHIP 01 - 03 NORTH; RANGE 57 & 58 WEST
ROUND TOP & MILLER RANCH QUADRANGLE

FIGURE 2

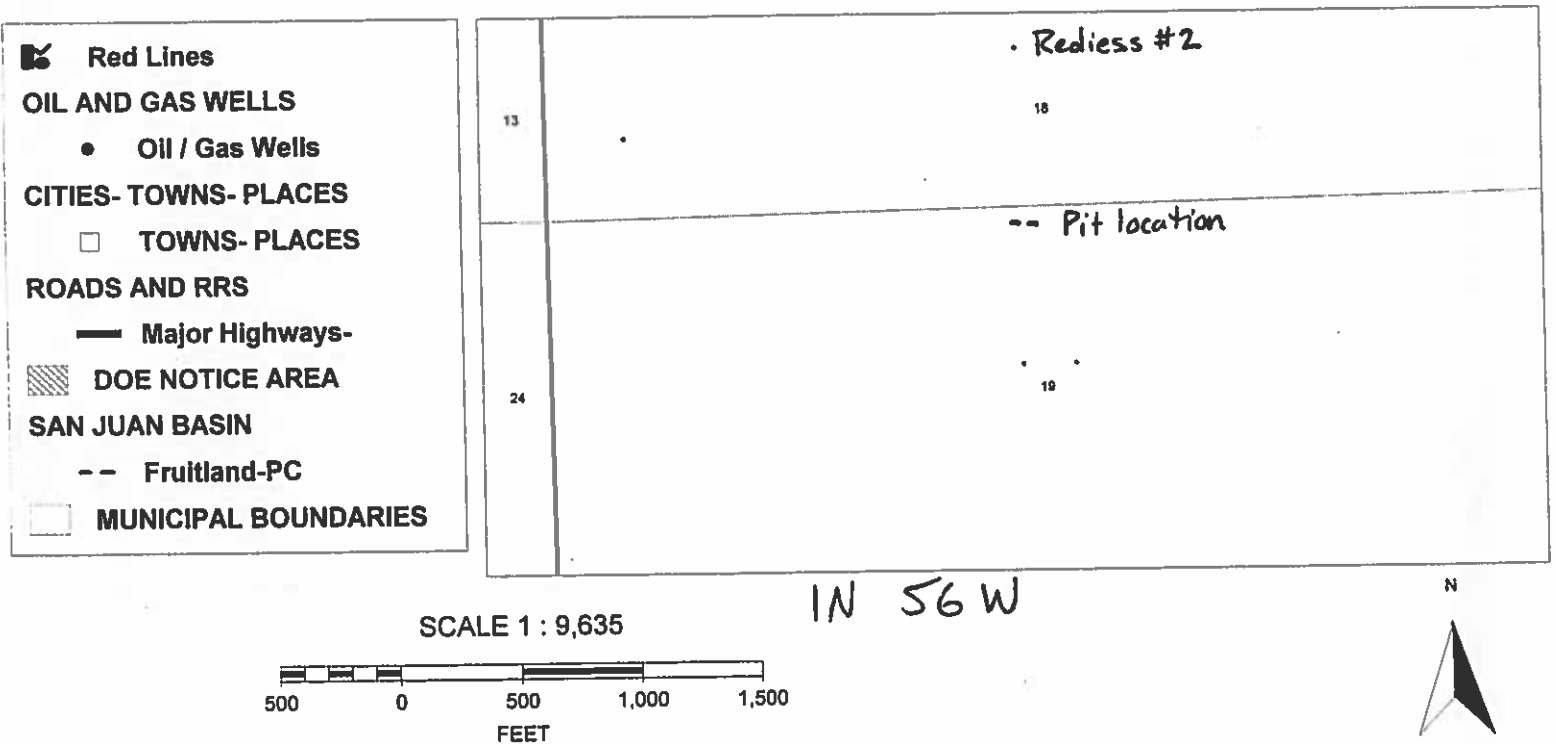


SITE LOCATION:



COLORADO

COGCC GIS Online



Calculations

Soil percolation rate of sandy soil in Morgan County Colorado
30 mm/hr = 2.835 in/day = .2363 ft/day

Pit surface dimensions rate
200 75 0.2363 3544.5 cubic feet/day

conversion Gallons Bbls Capacity
3544.5 x 7.48 26512.86 631.25 Q per day

Rediess Lease produces approximately 300 Bbls per day.

PIT DESIGN

