



February 10, 2012

State of Colorado Oil & Gas Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

RE: Application to convert
Arthur Sindt #5 to disposal well

Citation Oil & Gas Corp. proposes to convert the current shut in Arthur Sindt #5 to a salt water disposal well in the D, J and O Sand formations of the West Padroni Field, Logan County, Colorado. The well is currently with 2 7/8" tubing set at 4891.60' the surface casing is set at 284' and cemented to surface with 250 sacks cement. The production casing is set at 5150' and cemented up hole with 150 sacks cement with a calculated top of cement at 4145'.

Name and depth to bottom of all underground sources of drinking water which may be affected by proposed operation. The Ogallala aquifer is known to occur at a depth of 300-430 feet in this area, the Dakota is found at a depth of 1594-1850', the Cheyenne is found at depth of 1877-2080' in this area.

Type of fluid to be injected into the Arthur Sindt #5 will be produced water from current or proposed producing wells within the West Padroni Field. (See exhibit for water analysis)

Citation requests a Min Volume 250 BWIPD and a Max Volume 5000 BWIPD,
Min Pressure 100 psi and a Maximum pressure of 1500 psi

Included in this application are the following:

Form 31 original and one copy

Form 26 original

Analysis of injection water

Analysis of injection zone water

Resistivity log strip

Surface Owners Agreement

Map and List of Surface and Mineral Owners within ¼ Mile Radius

Affidavit of Mailing and Notice to Surface Owners, Mineral Owners

Remedial Correction plan for wells: The plugged well within the ¼ mile area will be evaluated to see if they are plugged properly.

Plat ¼ Mile Area of Review Oil/Gas Wells

Plat ½ Mile Radius with List of Oil/Gas Wells and well information on each well along with the names and depths of formations producing, having produced or to be injected

Oil & Gas Lease covering the well location

Surface Facility Diagram

Form 33

Wellbore Diagram current and proposed

Well location plat

Form 4 Sundry with Technical page and proposed injection program and operation

History of Well log and Sundries

Aquifer Exemption Statement for the D – J and O sand

Copy of application to add J sand

7 day notice letter to surface owner

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

UNDERGROUND INJECTION FORMATION PERMIT APPLICATION

1. Submit original and one copy of this form.
2. If data on this form is estimated, indicate as such.
3. Attachments – see checklist and explanation of attachments.
4. Aquifer exemption is required for all injection formations with water quality <10,000 TDS (Rule 322B). Immediately contact the Commission for further requirements if the total dissolved solids (TDS) as determined by water analysis for the injection zone is less than 10,000 ppm.
5. Attach a copy of the certified receipt to each notice to surface and mineral owner(s) or submit a sample copy of the notice and an affidavit of mailing or delivery with names and addresses of those notified. Each person notified shall be specified as either a surface or mineral owner as defined by C.R.S. 34-60-103(7).

**Complete the
Attachment Checklist**

Oper OGCC

Form 31 Original & 1 Copy	✓
Analysis fo Injection Zone Water	✓
Analysis of Injection Water	✓
Proposed Injection Program	✓
Resistivity or Induction Log	✓
Cement Bond Log	
Surface or Salt Water Displ Agrmt	
Notice to Surface/Mineral Owners	✓
Remedial Correction Plan for Wells	✓
Map Oil/Water Wells w/in 1/4 Mile	✓
List Oil/Gas Wells w/in 1/2 Mile	✓
Map Surface Owners w/in 1/4 Mile	✓
List Surface Owners w/in 1/4 Mile	✓
Map Mineral Owners w/in 1/4 Mile	✓
List Mineral Owners w/in 1/4 Mile	✓
Surface Facility Diagram	✓
Wellbore Diagram	✓
If Commercial Facility, Description of Ops & Area Served	
Unit Area Plat	✓

Project Name: Arthur Sindt #5 Project Location: SW 31-10N-52W 6th PM

Project Type: ☐ Enhanced Recovery ☒ Disposal ☐ Simultaneous Disposal

Single or Multiple Well Facility? ☐ Single ☒ Multiple

IF UNIT OPERATIONS, ATTACH PLAT SHOWING UNIT AREA

County: Logan Field Name and Number: West Padroni

OGCC Operator Number: 17180

Name of Operator: Citation Oil & Gas Corp

Address: P.O. Box 690688

City: Houston State: TX Zip: 77269

Contact Name and Telephone:
Nathania Naftaly

No: 281-891-1570

Fax: 281-580-2168

Injection Fluid Type: ☒ Produced Water ☐ Natural Gas ☐ CO₂ ☐ Drilling Fluids

☐ Exempt Gas Plant Waste ☐ Used Workover Fluids ☐ Other Fluids (describe): _____

Commercial Facility? ☐ Yes ☒ No

If Yes, describe area of operation and types of fluids to be injected at this facility:

PROPOSED INJECTION FORMATIONS

FORMATION A (Name): D-Sand, J-Sand, O-Sand

Porosity: 20%

Formation TDS: _____ Frac Gradient: _____ psi/ft Permeability: 500 md

Proposed Stimulation Program: ☐ Acid ☐ Frac Treatment ☒ None

FORMATION B (Name): _____ Porosity: _____

Formation TDS: _____ Frac Gradient: _____ psi/ft Permeability: _____

Proposed Stimulation Program: ☐ Acid ☐ Frac Treatment ☒ None

Anticipated Project Operating Conditions

Under normal operating conditions, estimated fluid injection rates and pressures:

FOR WATER: A minimum of 250 bbls/day @ 100 psi to a maximum of 5000 bbls/day @ 1500 psi.

FOR GAS: A minimum of _____ mcf/day @ _____ psi to a maximum of _____ bbls/day @ _____ psi.

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

Print Name: Nathania Naftaly

Signed: Nathania Naftaly

Title: Permitting Analyst III

Date: 2/4/2012

OGCC Approved: _____

Title: _____

Date: _____

Order No: _____

UIC FACILITY NO:

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



FOR OGCC USE ONLY

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>17180</u>	Contact Name and Telephone: <u>Nathanial Naftaly</u>
Name of Operator: <u>Citation Oil & Gas Corp.</u>	No: <u>281-891-1570</u>
Address: <u>P.O. Box 690688</u>	Fax: <u>281-580-2168</u>
City: <u>Houston</u> State: <u>TX</u> Zip: <u>77269</u>	

Chemical Analysis of fluid	Oper	OGCC

OGCC Disposal Facility Number: _____
Operator's Disposal Facility Name: <u>Sindt</u> Operator's Disposal Facility Number: _____
Location (QtrQtr, Sec, Twp, Rng, Meridian): <u>SW 31-10-52W</u>
Address: _____
City: _____ State: _____ Zip: _____ County: _____

If more space is required,
attach additional sheet.

Add Source: OGCC Lease No: _____ API No: 05-075-66603 Well Name & No: Arthur Sindt 4
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: NE/NE Section: 7 Township: 9N Range: 52W Producing Formation: _____
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 7544

Add Source: OGCC Lease No: _____ API No: 05075-06675 Well Name & No: Arthur Sindt 8
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: NE/SW Section: 31 Township: 10N Range: 52W Producing Formation: _____
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 6965

Add Source: OGCC Lease No: _____ API No: 05-075-08596 Well Name & No: Arthur Sindt 10
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: SW/SE Section: 6 Township: 9N Range: 52W Producing Formation: _____
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 8323

Add Source: OGCC Lease No: _____ API No: 05-075-09340 Well Name & No: Arthur Sindt 13
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: SE/SW Section: 31 Township: 10N Range: 52W Producing Formation: _____
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 6646

Add Source: OGCC Lease No: _____ API No: 05-075-09370 Well Name & No: Arthur Sindt 14-H
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: NE/SW Section: _____ Township: _____ Range: _____ Producing Formation: _____
☐ Analysis Attached? ☒ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 8062

Add Source: OGCC Lease No: _____ API No: 05-075-09333 Well Name & No: Fluarty 1
☒ Operator Name: Citation Oil & Gas Corp. Operator No: 17180
Delete Source: Location: QtrQtr: NW/SE Section: 6 Township: 9N Range: 52W Producing Formation: _____
☐ Analysis Attached? ☐ Yes ☐ No Transported to disposal site via: ☒ Pipeline ☐ Truck TDS: 8269

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

Print Name: Nathanial Naftaly

Signed: Nathanial Naftaly

Title: Permitting Analyst III

Date: 2/3/2012

OGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Attention: Herschel Kennedy

Lease: Sindt

Formation:

Salesman: Randy Tipton

CC: Bob Rogers

Target Name: Sindt 8

Sample Point: Sindt 8

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	128
Magnesium	51
Barium	
Strontium	
Sodium(calc.)	2172
Bicarbonate Alkalinity	2113
Sulfate	16
Chloride	2485
Resistivity	0.9189

Appended Data(mg/L)

CO2	167
H2S	4.5
Iron	0
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.11
pH(calc.)	
Temperature(°F)	135
Pressure(psia)	25
Density	8.37

Additional Data

Specific Gravity	1.00
Total Dissolved Solids(Mg/L)	6965
Total Hardness(CaCO3 Eq Mg/	529

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

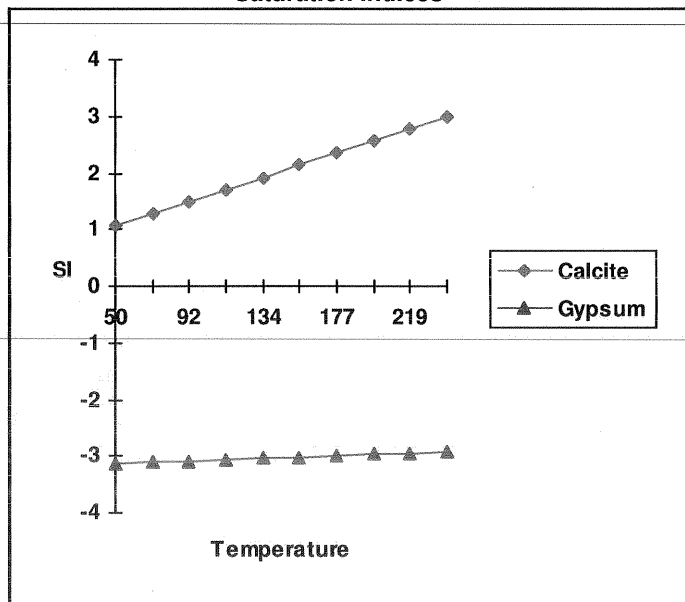
Calculation Method	Value
Known pH	8.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.93	110.30
Gypsum (Calcium Sulfate)	-3.04	
Hemihydrate (Calcium Sulfate)	-2.90	
Anhydrite (Calcium Sulfate)	-2.98	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	1.08	1.29	1.51	1.72	1.93	2.14	2.35	2.57	2.78	3.00
Gypsum	-3.13	-3.10	-3.08	-3.06	-3.04	-3.02	-2.99	-2.97	-2.95	-2.93

Lab Tech.: Linda Poljka



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Lease: Sindt

Attention: Herschel Kennedy

Formation:

Salesman: Randy Tipton

CC: Bob Rogers

Target Name: Sindt 10

Sample Point: Sindt 10

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	132
Magnesium	29
Barium	
Strontium	
Sodium(calc.)	2706
Bicarbonate Alkalinity	2294
Sulfate	10
Chloride	3151
Resistivity	0.7690

Appended Data(mg/L)

CO2	176
H2S	4
Iron	1
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.13
pH(calc.)	
Temperature(°F)	125
Pressure(psia)	25
Density	8.38

Additional Data

Specific Gravity	1.01
Total Dissolved Solids(Mg/L)	8323
Total Hardness(CaCO3 Eq Mg/	449

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

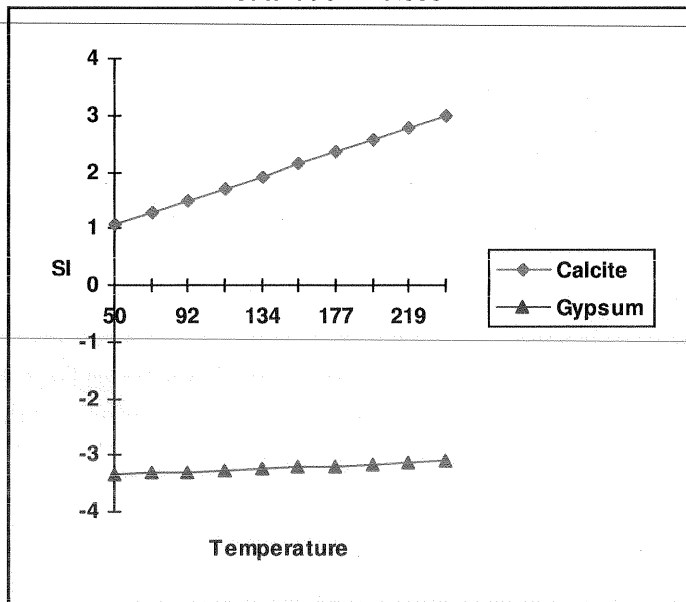
Calculation Method	Value
Known pH	8.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.83	113.40
Gypsum (Calcium Sulfate)	-3.25	
Hemihydrate (Calcium Sulfate)	-3.11	
Anhydrite (Calcium Sulfate)	-3.26	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	1.08	1.29	1.50	1.71	1.93	2.14	2.35	2.56	2.78	2.99
Gypsum	-3.33	-3.31	-3.29	-3.26	-3.24	-3.21	-3.19	-3.16	-3.14	-3.11

Lab Tech.: Linda Poljka



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Lease: Sindt

Formation:

Salesman: Randy Tipton

Attention: Herschel Kennedy

CC: Bob Rogers

Target Name: Sindt 13

Sample Point: Sindt 13

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	96
Magnesium	44
Barium	
Strontium	
Sodium(calc.)	2083
Bicarbonate Alkalinity	2172
Sulfate	8
Chloride	2242
Resistivity	0.9631

Appended Data(mg/L)

CO2	194
H2S	3
Iron	1
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.10
pH(calc.)	
Temperature(°F)	130
Pressure(psia)	25
Density	8.37

Additional Data

Specific Gravity	1.00
Total Dissolved Solids(Mg/L)	6646
Total Hardness(CaCO3 Eq Mg/	420

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

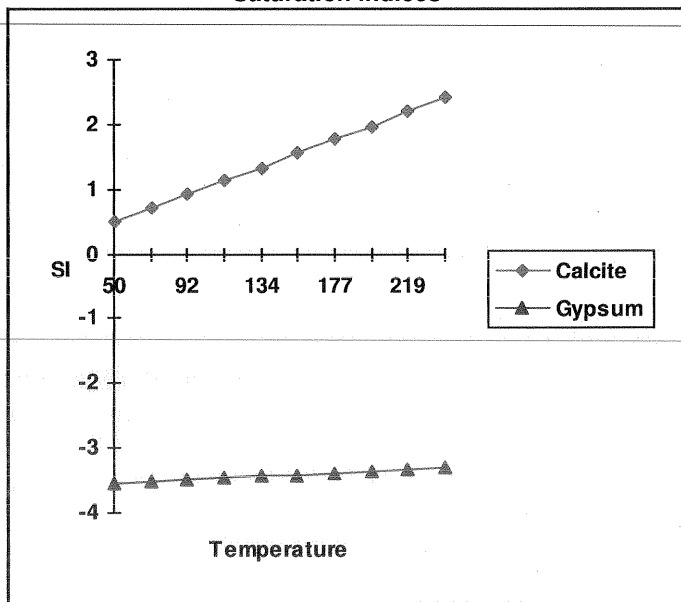
Calculation Method	Value
Known pH	7.50

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.30	79.20
Gypsum (Calcium Sulfate)	-3.44	
Hemihydrate (Calcium Sulfate)	-3.29	
Anhydrite (Calcium Sulfate)	-3.41	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	0.50	0.71	0.92	1.13	1.34	1.56	1.77	1.98	2.20	2.41
Gypsum	-3.53	-3.51	-3.48	-3.46	-3.43	-3.41	-3.38	-3.36	-3.33	-3.31

Lab Tech.: Linda Poljka



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Attention: Herschel Kennedy

CC: Bob Rogers

Lease: Sindt

Formation:

Salesman: Randy Tipton

Target Name: Sindt 14-H

Sample Point: Sindt 14-H

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	128
Magnesium	56
Barium	
Strontium	
Sodium(calc.)	2577
Bicarbonate Alkalinity	2172
Sulfate	98
Chloride	3030
Resistivity	0.7939

Appended Data(mg/L)

CO2	185
H2S	3
Iron	1
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.13
pH(calc.)	
Temperature(°F)	85
Pressure(psia)	25
Density	8.38

Additional Data

Specific Gravity	1.01
Total Dissolved Solids(Mg/L)	8062
Total Hardness(CaCO3 Eq Mg/	550

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

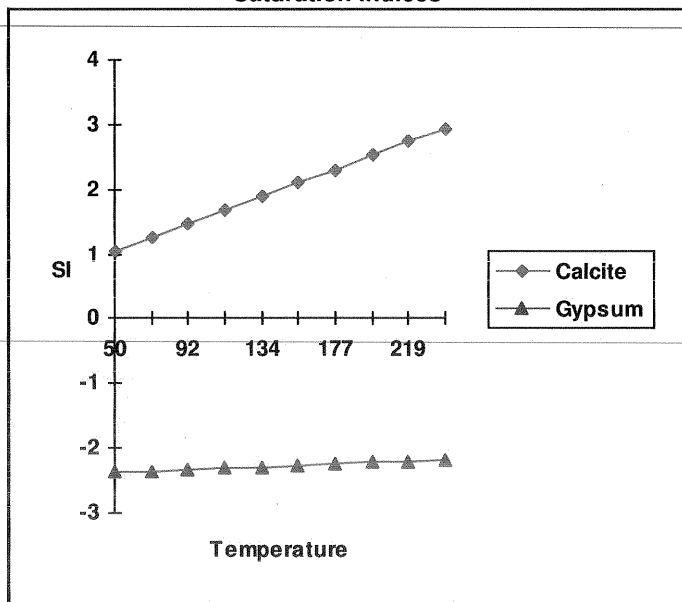
Calculation Method	Value
Known pH	8.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.39	106.50
Gypsum (Calcium Sulfate)	-2.33	
Hemihydrate (Calcium Sulfate)	-2.15	
Anhydrite (Calcium Sulfate)	-2.62	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	1.04	1.25	1.46	1.68	1.89	2.10	2.31	2.53	2.74	2.95
Gypsum	-2.37	-2.35	-2.33	-2.31	-2.29	-2.26	-2.24	-2.22	-2.20	-2.18

Lab Tech.: Linda Poljka



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Lease: Fluharty

Formation:

Salesman: Randy Tipton

Attention: Herschel Kennedy

CC: Bob Rogers

Target Name: Fluharty 1

Sample Point: Fluharty 1

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	104
Magnesium	51
Barium	
Strontium	
Sodium(calc.)	2686
Bicarbonate Alkalinity	2264
Sulfate	12
Chloride	3151
Resistivity	0.7741

Appended Data(mg/L)

CO2	220
H2S	5
Iron	1
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.13
pH(calc.)	
Temperature(°F)	120
Pressure(psia)	25
Density	8.38

Additional Data

Specific Gravity	1.01
Total Dissolved Solids(Mg/L)	8269
Total Hardness(CaCO3 Eq Mg/	469

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

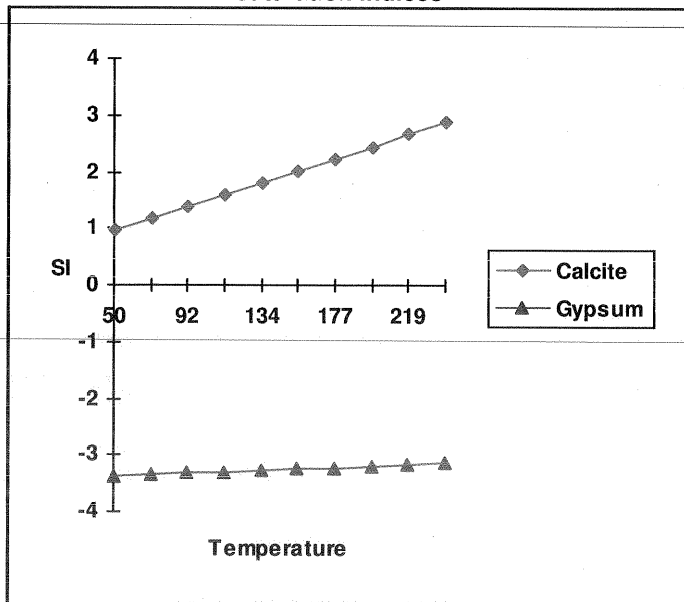
Calculation Method	Value
Known pH	8.00

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.67	88.70
Gypsum (Calcium Sulfate)	-3.28	
Hemihydrate (Calcium Sulfate)	-3.14	
Anhydrite (Calcium Sulfate)	-3.32	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	0.97	1.18	1.39	1.60	1.82	2.03	2.24	2.45	2.67	2.88
Gypsum	-3.36	-3.34	-3.31	-3.29	-3.27	-3.24	-3.22	-3.19	-3.17	-3.14

Lab Tech.: Linda Poljka



Convert Well To Salt Water Disposal
Arthur Sindt #5
West Padroni Field
Logan County, Colorado
(September 15, 2011)

OBJECTIVE:

CONVERT THE ARTHUR SINDT #5 SU PRODUCER TO SALT WATER DISPOSAL WELL TO INCREASE FIELD DISPOSAL CAPACITY

EXISTING CONDITION:

WELL IS CURRENTLY SHUT-IN AS UNECONOMICAL TO RETURN TO PRODUCTION

PROPOSED PROCEDURE:

- ✓ ± 4612' 2 7/8" injection tbg string.
- ✓ 5 1/2" x 2 7/8" injection packer is required for the conversion.
- ✓ Recover ESP in well for repair and reconditioning.

	PERFORATIONS		
	D-Sand	J-Sand	O-Sand
Current	-	-	5096-5108'
Proposed	4712-4736'	4830-4845'	5096-5108', 5110-5130'

1. MIRU Spooler. MIRU SU. TOOHH w/ 158 jts 2 7/8" tbg & 179 stage TD 980 pump, seal section, 80 Hp motor, and spool ESP cable. Send ESP and cable for reconditioning and repair. Lay down 2 7/8" production tbg string.
2. PU & TIH w/ 2 7/8" injection tbg to tag PBTD (~5130'). Circulate hole clean. TOOHH.
3. PU 2 7/8" x 5 1/2" pkr & TIH w/ ± 4612' 2 7/8" injection tbg and pkr. Set pkr @ ± 4612' load backside and pressure test to 1000# for 10 minutes w/o loss. If test good proceed to next step; otherwise consult w/ engineer for a new procedure. TOOHH w/ tbg and pkr.
Stand tbg and pkr.

4. MIRU WL. TIH w/ CCL, GR, CBL and CSG inspection tool. Log and inspect from PBTD'-surf. Send logs to Houston Central Region Engineering Office for inspection.
 5. RU perforating guns. RIH w/ 4" expendable 36 gram charges 4 jspf 36 gram charges & 90° phasing gun. Correlate w/ Schlumberger Induction-Electric Log (1/29/1961) and perforate D-Sand 4712'-36', J-Sand 4830-45', and O-Sand 5110-PBTD'. RDMO WL.
 6. PU & TIH w/ 148 jts 2 $\frac{7}{8}$ " injection tbg, 5 $\frac{1}{2}$ " Arrowset prk, 2 $\frac{7}{8}$ " "F" nipple, 2 $\frac{7}{8}$ 10' tbg sub, and "R" Nipple. Set pkr @ \pm 4612' (<100' from top injection perfs). RDMO SU.
 7. Load backside and pressure test to state permitted pressure, MIT w/ COGCC representative on site. If MIT is good proceed to next step; otherwise consult w/ engineer for a new procedure.
 8. Hook up well to water injection line and begin injection. Monitor rates and pressure for stimulation.
-
-
-



Water Analysis Report

12/8/2011

Address:

Customer: Citation Oil & Gas

Attention: Herschel Kennedy

Lease: Sindt

Formation:

Salesman: Randy Tipton

CC: Bob Rogers

Target Name: Snidt 4

Sample Point: Snidt 4

Sample Date: 11/15/2011

Test Date: 11/30/2011

Water Analysis(mg/L)

Calcium	92
Magnesium	49
Barium	
Strontium	
Sodium(calc.)	2463
Bicarbonate Alkalinity	1952
Sulfate	1
Chloride	2969
Resistivity	0.8504

Appended Data(mg/L)

CO2	246
H2S	4
Iron	18
Oxygen	
Manganese	

Physical Properties

Ionic Strength(calc.)	0.12
pH(calc.)	
Temperature(°F)	125
Pressure(psia)	25
Density	8.37

Additional Data

Specific Gravity	1.01
Total Dissolved Solids(Mg/L)	7544
Total Hardness(CaCO3 Eq Mg/	431

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

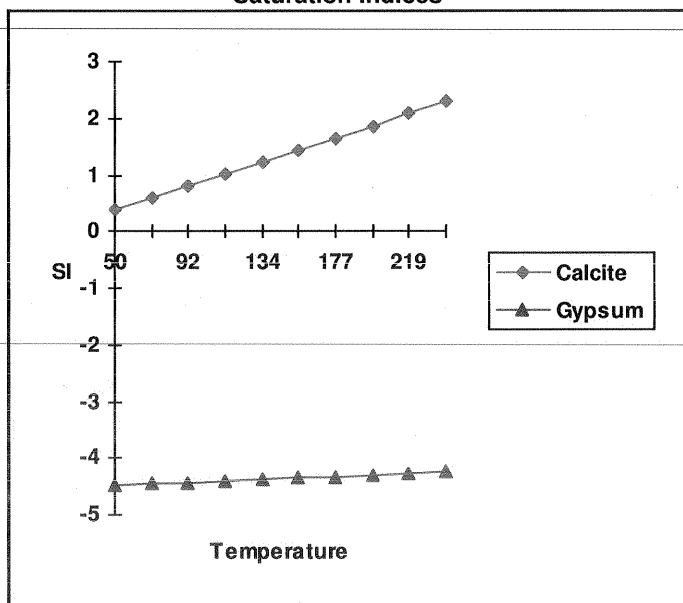
Calculation Method	Value
Known pH	7.50

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	1.13	73.70
Gypsum (Calcium Sulfate)	-4.39	
Hemihydrate (Calcium Sulfate)	-4.25	
Anhydrite (Calcium Sulfate)	-4.40	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

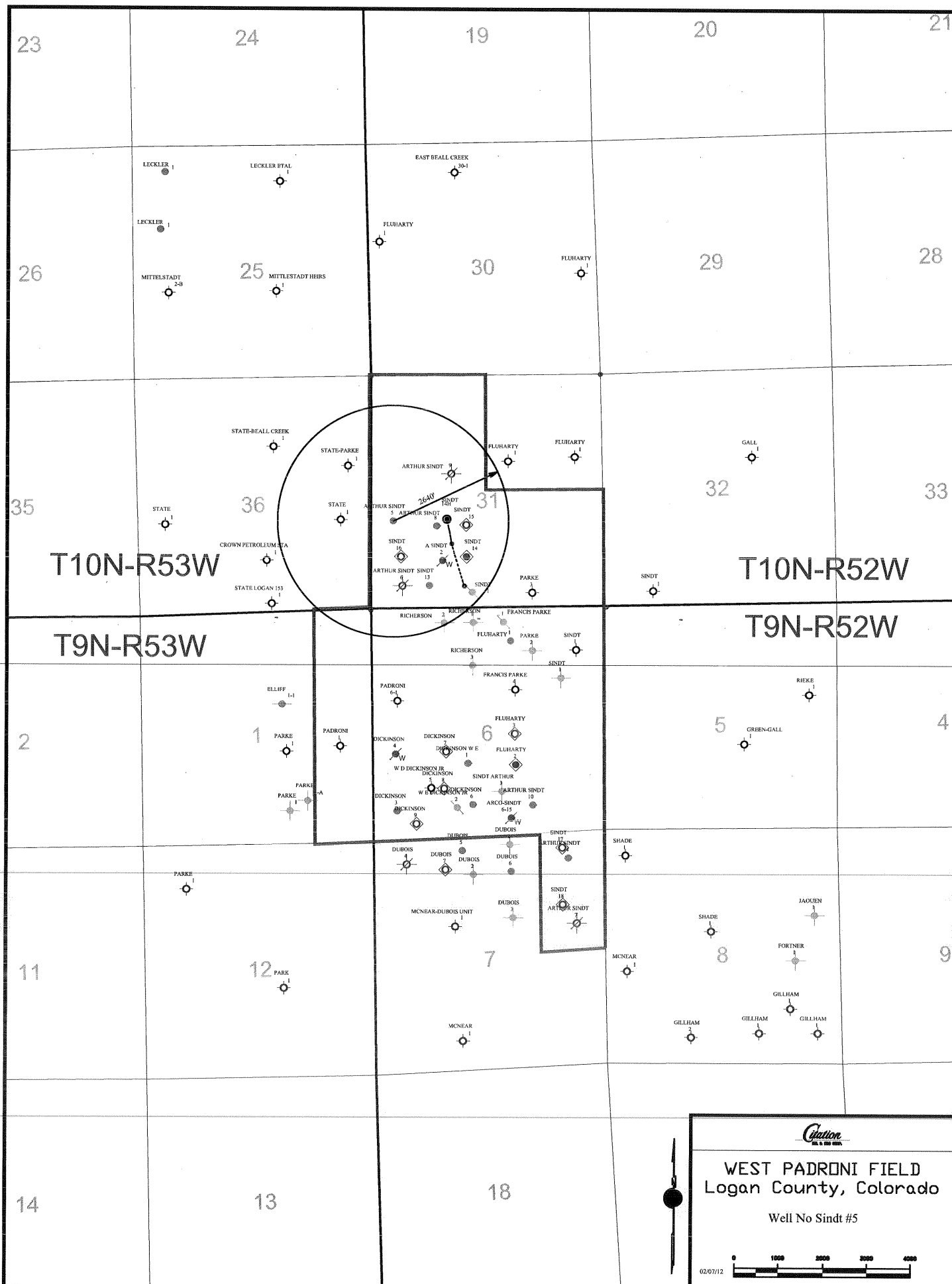
	50	71	92	113	134	156	177	198	219	240
Calcite	0.38	0.59	0.80	1.01	1.22	1.44	1.65	1.86	2.08	2.29
Gypsum	-4.48	-4.45	-4.43	-4.40	-4.38	-4.35	-4.33	-4.30	-4.28	-4.25

Lab Tech.: Linda Poljka

CITATION OIL & GAS CORP.
ARTHUR SINDT 5
SW 31-10N-52W
Logan County, Colorado

The water from the following wells will be injected into the Sindt #5.

	QRT/QRT	SEC.	TWNSP.	RANGE	API #
Arthur Sindt #4	NE/NE	7	9N	52W	05-075-06603
Arthur Sindt #8	NESW	31	10N	52W	05-075-06675
Arthur Sindt #10	SW/SE	6	9N	52W	05-075-08596
Arthur Sindt #13	SE/SW	31	10N	52W	05-075-09340
Arthur Sindt #14H	NE/SW	31	10N	52W	05-075-09370
Dickinson #1	NE/SW	6	9N	52W	05-075-06625
Dickinson #3	SW/SW	6	9N	52W	05-075-06620
Dickinson #6	SE/SW	6	9N	52W	05-075-09342
Fluharty #1	NW/NE	6	9N	52W	05-075-09333

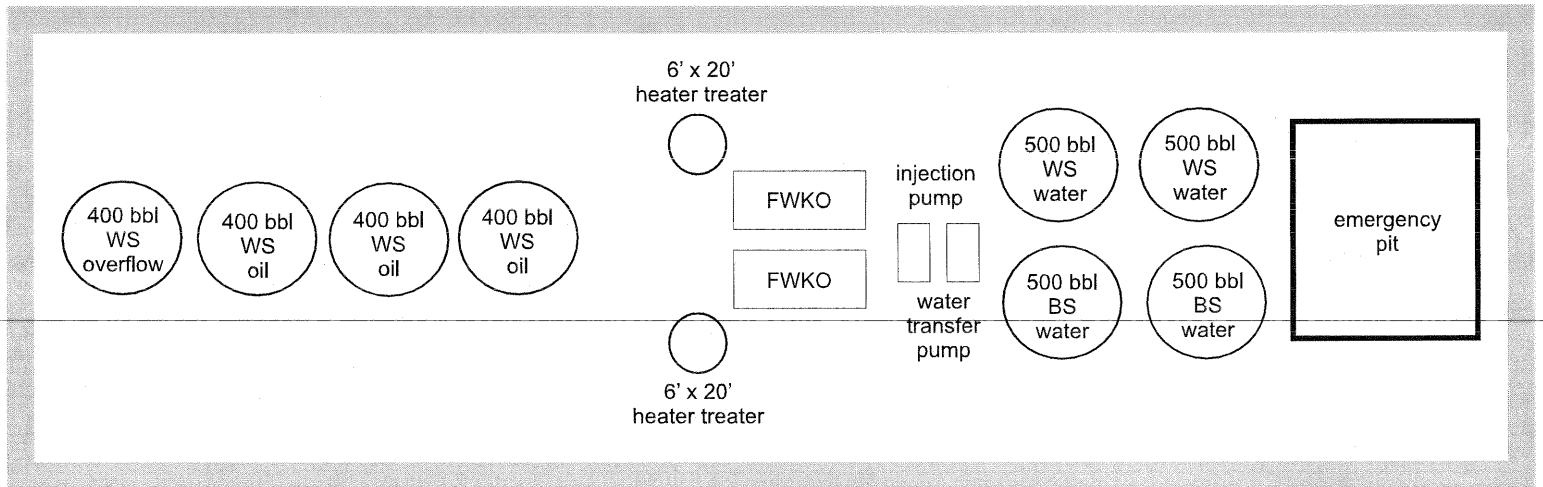
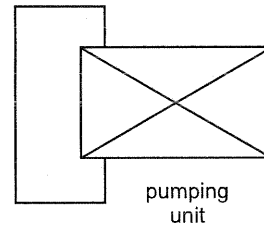
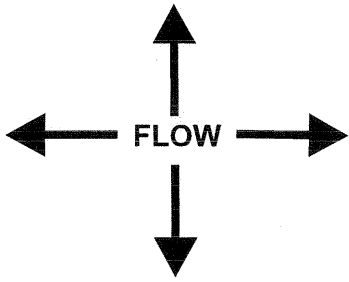


WEST PADRONI FIELD
Logan County, Colorado

Well No Sindt #5

0 1000 2000 3000 4000

02/07/12



LEGEND
WS - welded steel
BS - bolted steel

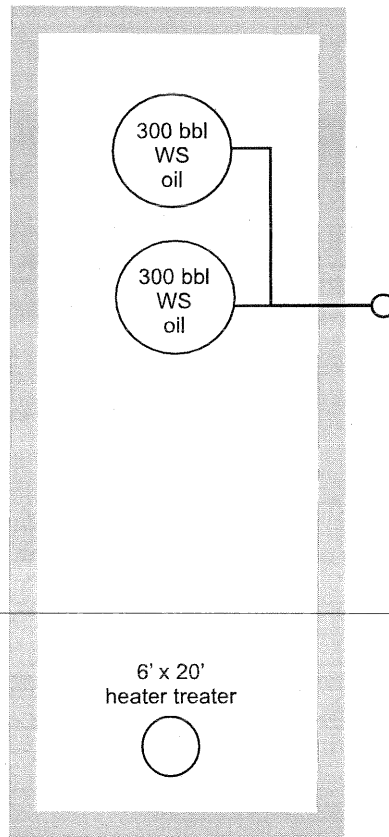
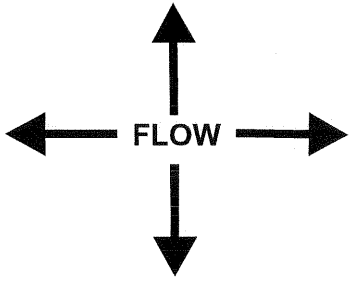
NOT TO SCALE

Prepared by:
CEG, Inc.
Houston, Texas

Date:

CITATION OIL & GAS, CORP.
Sindt Dickenson Tank Battery West Padroni Field, Logan County, Colorado
SW SW S - 31, T - 10N, R - 52E - 40° 47.42' N / 103° 13.42' W
Facility ID - 91.16446

**SITE
PLAT**



LEGEND
WS - welded steel

VOT TO SCALE

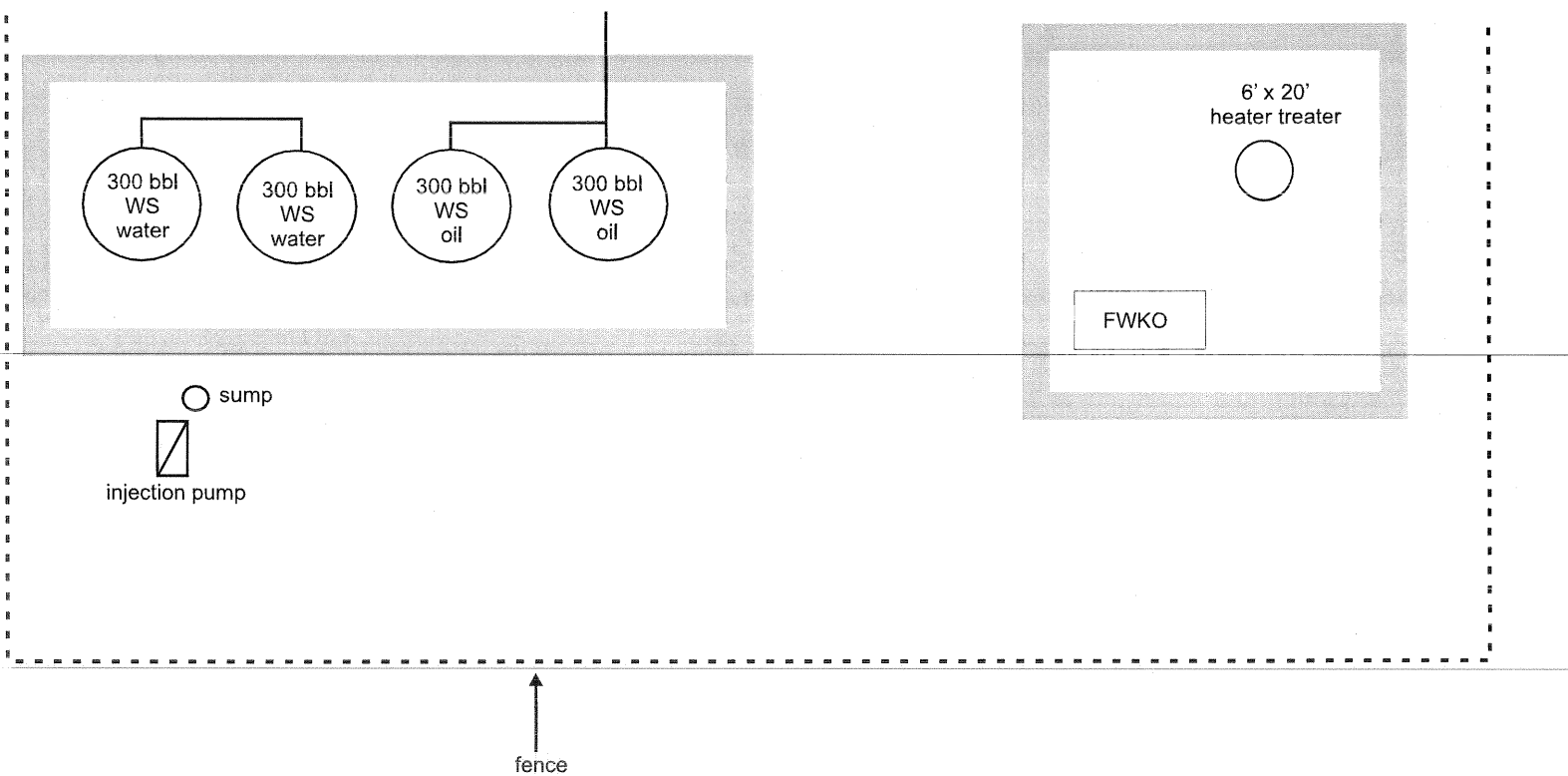
prepared by:
CEG, Inc.
Houston, Texas

ate:

CITATION OIL & GAS, CORP.
Fluharty Tank Battery West Padroni Field, Logan County, Colorado
SW SW S - 31, T - 10N, R - 52E - 40° 47.405' N / 103° 13.420' W
Facility ID - 90 16445

**SITE
PLAT**

County Road



LEGEND
WS - welded steel

VOT TO SCALE

prepared by:
CEG, Inc.
Houston, Texas

ate:

CITATION OIL & GAS, CORP.
Dubois Tank Battery West Padroni Field, Logan County, Colorado
NE NW S - 7, T - 9N, R - 52E - 40° 46.477' N / 103° 13.270' W
Facility ID - 90 16447

**SITE
PLAT**



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

INJECTION WELL PERMIT APPLICATION

Submit a completed Form 33 with or after approval obtained on Form 31 (Underground Injection Permit Application) or you must have a previously approved Injection Well Permit.

1. Operator may not commence injection into this well until this form is approved.
2. Each individual injection well must be approved by this form.

Well Name and Number: Arthur Sindt 5 API No: 05-075-06680
UIC Facility No: _____ (as assigned on an approved Form 31)
Project Name: Arthur Sindt 5 Operator Name: Citation Oil & Gas Corp.
Field Name and Number: West Padroni 67000 County: Logan
QtrQtr: NWSW Sec: 31 Twp: 10N Range: 52W Meridian: 6th

Complete the Attachment Checklist

	Oper	OGCC
Current Wellbore Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed Wellbore Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CURRENT WELLBORE INFORMATION

	SIZE	DEPTH	NO. SACKS	CEMENT TOP	Cement Top Determined By:		
					CBL	CIRCULATED	CALCULATED
Surface Casing	8 5/8	284	250	Surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intermediate Casing (if any)					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production Casing	5 1/2"	5150'	150	Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Plug Back Total Depth: 5130 Tubing Depth: 4891.60 Packer Depth: _____

O - Sand _____ Formation Gross Perforation Interval: 5096 to 5108
_____ Formation Gross Perforation Interval: _____ to _____
_____ Formation Open Hole Interval (if any): _____ to _____

List below all Plugs, Bridge Plugs, Stage Cementing or Squeeze Work performed on this wellbore: (if more space needed, continue on reverse side of this form.)

1. _____
2. _____
3. _____
4. _____

Describe below any changes to the wellbore which will be made upon conversion. (This includes but not limited to changes of tubing and packer setting depths, any additional squeeze work for aquifer protection or casing leaks, setting of bridge plugs to isolate non-injection formations.)

1. Open additional perforations in D Sand f4712-4736, J Sand 4830-4845 and O Sand 5110-5130 Set packer @4612

2. _____
3. _____
4. _____

Comments: _____

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

Print Name: Nathania Naftaly

Signed: Nathania Naftaly Title: Permitting Analyst III Date: 2/4/2012

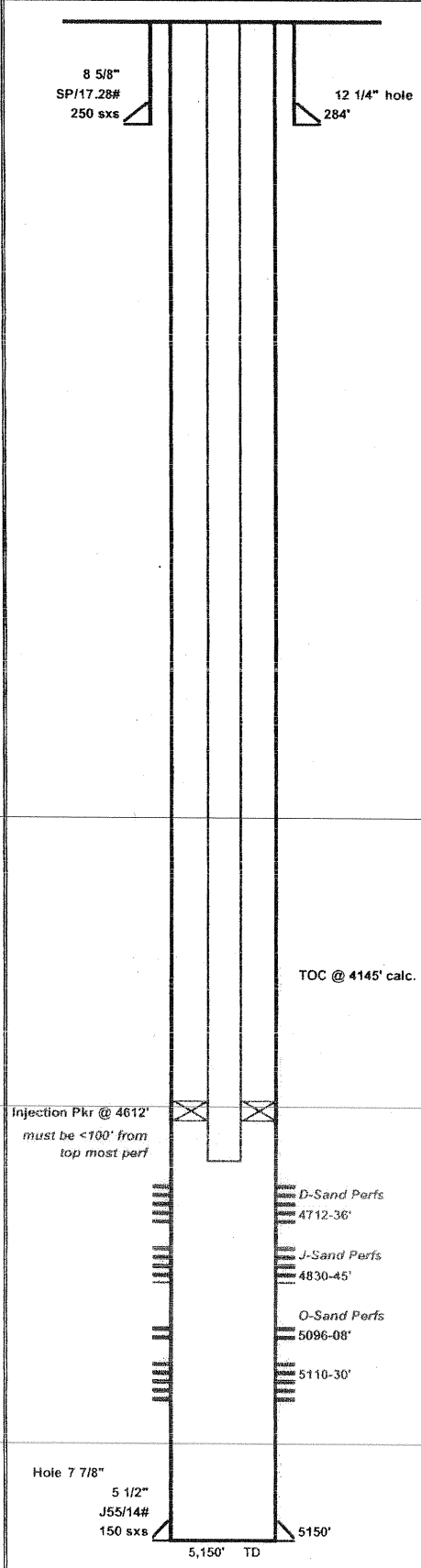
OGCC Approved: _____ Title: _____ Date: _____

MAX. SURFACE INJECTION PRESSURE: _____ If Disposal Well, MAX. INJECTION VOL. LIMIT: _____

CONDITIONS OF APPROVAL, IF ANY: _____

[illegible]

WELLBORE SCHEMATIC

Proposed		Lease:		Well No.	
 <p>8 5/8" SP/17.28# 250 sxs</p> <p>12 1/4" hole 284"</p> <p>TOC @ 4145' calc.</p> <p>Injection Pkr @ 4612' must be <100' from top most perf</p> <p>D-Sand Perfs 4712-36'</p> <p>J-Sand Perfs 4830-45'</p> <p>O-Sand Perfs 5096-08'</p> <p>5110-30'</p> <p>Hole 7 7/8" 5 1/2" J55/14# 150 sxs</p> <p>5,150' TD</p>		API No. 05-075-06680		Status SWD	
		Location: NW/SW Sec. 31, T10N-R52W			
		County: Logan	State: CO	Field: Padroni West	
		TD 5150'	GL 4110'	Spud Date: 1/21/1961	
		PBTD 5130'	KB 4120'	Comp Date: 1/31/1961	
		Current Perfs/OH: 4712-36', 4830-45', 5096-5108', 5110-30'		Current Zone: D-Sand, J-Sand, O-Sand	
		Surface Equipment			
		Unit Make:		Unit Size:	
		Unit S/N:		Unit Rotation:	
		SPM:	Stroke Length:	Unit Sheave:	
Prime Mover:		Motor Sheave:			
Motor S/N:		Motor RPM:			
Casing Breakdown					
	Size	Grade / Wt	Depth	Hole Size	Cement
Surface	8 5/8"	SP/17.28#	284'	12 1/4"	250 sxs
Production	5 1/2"	J55/14#	5150'	7 7/8"	150 sxs
Production					
Production					
Liner					
Tubing Breakdown					
	Qty	Description	Footage		
	158	2-7/8" tbg	4835.00'		
TOTAL 4835.00'					
Rod Breakdown					
	Qty	Description	Footage		
TOTAL 0.00'					
Comments D-Sand 4702' J-Sand 4820' O-Sand 5094'					
PREPARED BY: JH UPDATED: 9/14/2011					

FORM
4
Rev 12/05

State of Colorado

Oil and Gas Conservation Commission

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



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 17180	4. Contact Name Bridget Lisenbe	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Citation Oil & Gas Corp.	Phone: (281) 891-1570	
3. Address: PO Box 690688 City: Houston State: TX Zip: 77269	Fax: (281) 580-2168	
5. API Number 05-075-06680	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name: Arthur Sindt	7. Well/Facility Number 5	Directional Survey
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NW SW Sec. 31 T10N R52W 6 PM		Surface Eqpm Diagram
9. County: Logan	10. Field Name: West Padroni	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		Other Procedure <input checked="" type="checkbox"/>

General Notice

☐ CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

Change of Surface Footage from Exterior Section Lines:	FNU/FSL	FEL/FWL
Change of Surface Footage to Exterior Section Lines:		
Change of Bottomhole Footage from Exterior Section Lines:		
Change of Bottomhole Footage to Exterior Section Lines:		

attach directional survey

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer

Latitude _____ Distance to nearest property line _____ Distance to nearest bldg, public rd, utility or RR _____

Longitude _____ Distance to nearest lease line _____ Is location in a High Density Area (rule 603b)? Yes/No ☐

Ground Elevation _____ Distance to nearest well same formation _____ Surface owner consultation date: _____

GPS DATA:

Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____

☐ CHANGE SPACING UNIT

Formation	Formation Code	Spacing order number	Unit Acreage	Unit configuration

☐ Remove from surface bond

Signed surface use agreement attached

<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: _____ Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> CHANGE WELL NAME From: _____ To: _____ Effective Date: _____
--	--

<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for inspection: _____	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: _____ Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT _____
---	--

☐ SPUD DATE: _____

☐ REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)

☐ SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date

☐ RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.

Final reclamation will commence on approximately _____ ☐ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent Approximate Start Date: _____	<input type="checkbox"/> Report of Work Done Date Work Completed: _____
--	--

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

<input type="checkbox"/> Intent to Recomplete (submit form 2) <input type="checkbox"/> Change Drilling Plans <input type="checkbox"/> Gross Interval Changed? <input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Request to Vent or Flare <input type="checkbox"/> Repair Well <input type="checkbox"/> Rule 502 variance requested <input checked="" type="checkbox"/> Other: Convert to INJ	<input type="checkbox"/> E&P Waste Disposal <input type="checkbox"/> Beneficial Reuse of E&P Waste <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases
---	--	--

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

Signed: Nathanial Naftaly Date: 2/4/2012 Email: Nnaftaly@cogc.com

Print Name: Nathanial Naftaly Title: Permitting Analyst III

COGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 17180 API Number: 05-075-06680
2. Name of Operator: Citaion Oil & Gas Corp. OGCC Facility ID # 150281
3. Well/Facility Name: Arthur Sindt Well/Facility Number: 5
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SW SE Sec. 25 T14S R42W 6 PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

Citaion Oil & Gas Corp. requests permission to convert the refernced well to an injector in the D-Sand, J-Sand and O-Sand per attached procedure.

P 10N

(SHOW ALL MEASUREMENTS FROM SURFACE LEVEL)

PSIG KIND OF MUD USED DURING COMPLETION Oil base mud. to measure.

CORE RECORD: None NUMBER OF CORES _____ DEPTH _____ LAB. NUMBER _____

SET WHIPSTOCKS AT _____ SPECIAL CEMENTING JOBS _____

PERFORATION REPORT: TYPE OF Super PRESENT

Figure 1: Schematic representation of the experimental design. The figure shows a timeline of the experiment. It starts with a 'Pretest' phase, followed by a 'Main Experiment' phase. The Main Experiment is divided into two parts: 'Part 1' and 'Part 2'. Part 1 involves a 'Pretest' and a 'Main Experiment' with 'Condition 1' and 'Condition 2'. Part 2 involves a 'Pretest' and a 'Main Experiment' with 'Condition 1' and 'Condition 2'. The timeline ends with a 'Posttest' phase.

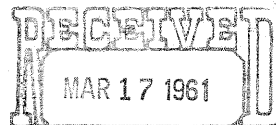
TREATED — ACID — FRACTURES. ETC.

MAX. & NET

Copy Tulsa
3-20-61

CASING, TUBING AND SUCKER RODS

[illegible]

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADOPRODUCERS CERTIFICATE OF CLEARANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM A LEASE

(Instructions for filing on reverse side)

Lease ARTHUR SINDT Well No. 5 Field West PadroniSec. 31 Twp. 10 N Range 52 W County Logan Pool "O" SandProducer or Operator ☒ Sinclair Oil & Gas CompanyAddress all Correspondence concerning this form to: Sinclair Oil & Gas CompanyStreet P. O. Box 9 City Fort Morgan State ColoradoThe above named producer or operator hereby authorizes Western Crude Marketers, Inc.
(Name of Transporter)Whose principal place of business is 1700 Broadway Denver 1, Colorado
(Street) (City) (State)And whose field address is P. O. Box 704, Sterling, Coloradoto transport 100 % of the oil or gas produced from the lease designated above until further notice.

Other transporters transporting oil or gas from this lease are:

None %

REMARKS:

NEW WELL COMPLETION

Date of First Production February 3, 1961 by swab - First Run 2-9-61.Production gauge on 24 hour basis 2-8-61 136 Bbl. Oil; 4 % Water;Too small to measure Mcf Gas.

The undersigned certifies that the rules and regulations of the Oil and Gas Conservation Commission of the State of Colorado have been complied with except as noted above and that the transporter(s) is (are) authorized to transport the percentage of oil and/or gas produced from the above described lease and that this authorization will be valid until further notice to the transporter named herein or until cancelled by the Colorado Oil and Gas Conservation Commission.

Executed this 11th day of March, 19 61

Approved:

Date MAR 17 1961Director A. J. GormanSinclair Oil & Gas Company
(Producer or Operator)COPY ORIG.
SIGNED A. B. PARKER /BLV
District Superintendent
(Affiant) (Title)

OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO

WELL COMPLETION REPORT

INSTRUCTIONS

Within thirty (30) days after the completion of any well, the owner or operator shall transmit to the Director three (3) copies of this form, for wells drilled on Patented or Federal lands and four (4) copies for wells drilled on State lands. Upon request, geological information will be kept confidential for six months after the filing thereof.

Field **West Padroni** Operator **Sinclair Oil & Gas Company**
 County **Logan** Address **P. O. Box 9**
 City **Fort Morgan** State **Colorado**
 Lease Name **Arthur Sindt** Well No. **5** Ground Level **1102 Ft.**
 Location **C- NW - SW** Section **31** Township **10N** Range **52W** Meridian **6th P.M.**
 (quarter quarter)
1,980 feet from **S** Section line and **660** feet from **W** Section Line
 Nor S or W

Drilled on: Private Land ☒ Federal Land ☐ State Land ☐
 Number of producing wells on this lease including this well: Oil **5**; Gas **-**
 Well completed, as: Dry Hole ☐ Oil Well ☒ Gas Well ☐

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed _____ Title **District Superintendent**
 Date _____

The summary on this page is for the condition of the well as above date.
 Commenced drilling **January 21**, 19 **61** Finished drilling **January 31**, 19 **61**

CASING RECORD

SIZE	WT. PER FT.	GRADE	DEPTH LANDED	NO. SKS. CMT.	W.O.C.	PRESSURE TEST	
						Time	Psi
8-5/8"	17.28	Sp.Wld.S1	284	250	12-Hrs.	1-Hr.	600
5-1/2"	14	J55 SS R2	5,150	150	72-hrs.	2-Hrs.	1500

CASING PERFORATIONS

Type of Charge	No. Perforations per ft.	From	Zone	To
Super Csg. Jets	4	5100'	NO	5108'

TOTAL DEPTH **5150** PLUG BACK DEPTH **5130**

Oil Productive Zone: From **5100** To **5108** Gas Productive Zone: From **-** To **-**
 Electric or other Logs run **IE, Micro-Log & Gamma Ray-Neutron** Date **January 21**, 19 **61**
 Was well cored? **No** Has well sign been properly posted? **Yes**

RECORD OF SHOOTING AND/OR CHEMICAL TREATMENT

DATE	SHELL, EXPLOSIVE OR CHEMICAL USED	QUANTITY	ZONE		FORMATION	REMARKS
			From	To		
	None					

Results of shooting and/or chemical treatment:

DATA ON TEST

Test Commenced **7** A.M. on **2-7** 19 **61** Test Completed **7** A.M. on **2-8** 19 **61**
 For Flowing Well:
 Flowing Press. on Csg. _____ lbs./sq.in.
 Flowing Press. on Tbg. _____ lbs./sq.in.
 Size Tbg. _____ in. No. feet run _____
 Size Choke _____ in.
 Shut-in Pressure _____
 For Pumping Well:
 Length of stroke used **64** inches.
 Number of strokes per minute **14**
 Diam. of working barrel **1-3/4** inches
 Size Tbg. **2-3/8** in. No. feet run **5124**
 Depth of Pump **5110** feet.

If flowing well, did this well flow for the entire duration of this test without the use of swab or other artificial flow device?

TEST RESULTS: Bbls. oil per day **136** API Gravity **16.0**
 Gas Vol. ***** Mcf/Day; Gas-Oil Ratio **-** Cf/Bbl. of oil
 B.S. & W. **4** %; Gas Gravity **-** (Corr. to 15.025 psi & 60°F)

* Too little to measure.

SEE
REVERSE
SIDE

THIS FORM MUST BE
SUBMITTED PRIOR TO
THE EXPIRATION OF THE
PERMIT. TYPE OR
PRINT IN BLACK INK.
COPY OF ACCEPTED
STATEMENT MAILED
ON REQUEST.

COLORADO DIVISION OF WATER RESOURCES

300 Columbine Bldg., 1845 Sherman St.
Denver, Colorado 80203

RECEIVED

MAY 28 '74

WATER RESOURCES
STATE ENGINEER
C.O.D.

FOR OFFICE USE ONLY

Div. 1 Cty. 38

XX STATEMENT OF BENEFICIAL USE OF GROUND WATER
AMENDMENT OF EXISTING RECORD

PERMIT NUMBER 74139

STATE OF COLORADO

COUNTY OF Logan

SS.

LOCATION OF WELL

THE AFFIANT(S) Inez M. & Arthur E Sindt

whose mailing
address is R. R. 2

County Logan

SW $\frac{1}{4}$ of the SW $\frac{1}{4}$, Section 31

City Sterling, Colorado 80751

(STATE) (ZIP)

Twp. 10 N, Rng. 52 W, 6 P.M.
(IN OR S) (E OR W)

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon; the well is located as described above, at distances of 1288 feet from the South section line and 1240 feet from the

West section line; water from this well was first applied to a beneficial use for the purpose(s) described herein on the

day of May, 19 74; the maximum sustained pumping rate of the well is 15 gallons per minute, the pumping

rate claimed hereby is 15 gallons per minute; the total depth of the well is 310 feet; the average annual amount

of water to be diverted is 2 acre-feet; for which claim is hereby made for Livestock

purpose(s); the legal description of the land on which the water from this well is used is

SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec 31, 10 N, 52W, 6 PM, Logan County, Colorado which totals

440 acres and which is illustrated on the map on the reverse side of this form; that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon; knows the content thereof; and that the same are true of his (their) knowledge.

Signature(s) Inez M. Sindt Arthur E. Sindt

Subscribed and sworn
to before me on this 23 day of May, 19 74

My Commission expires: My Commission expires June 27, 1974

(SEAL)

Elsie E. Stewart
NOTARY PUBLIC

ACCEPTED FOR FILING BY THE STATE ENGINEER OF COLORADO
PURSUANT TO THE FOLLOWING CONDITIONS:

FOR OFFICE USE ONLY

Court Case No. _____

Sec. _____ $\frac{1}{4}$, _____ $\frac{1}{4}$, _____ $\frac{1}{4}$,

Well Use 2

Dist. 64 Basin _____ Man. Dis. _____

Prior. _____ Mo. _____ Day _____ Yr. _____

Well drilled by Stewart Drilling Co Lic. No. 66

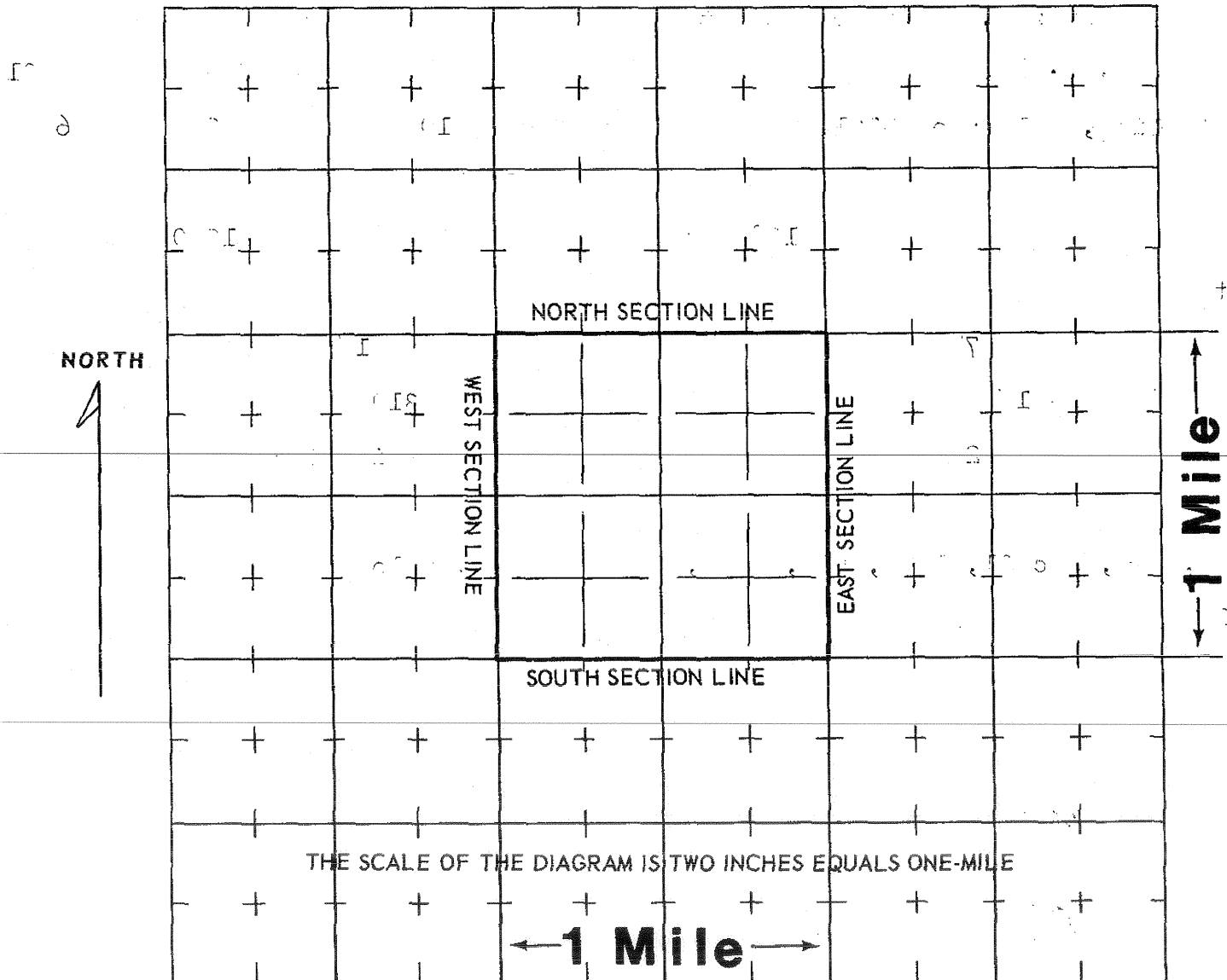
Pump installed by Stewart Drilling Co Lic. No. 66

Meter Serial No. _____ ☐ Flow Meter ☐ Electric Meter ☐ Fuel Meter

Owner of land on which
water is being used _____

THE LOCATION OF THE WELL MUST BE SHOWN AND THE AREA ON WHICH THE WATER IS USED
MUST BE SHADED OR CROSS-HATCHED ON THE DIAGRAM BELOW.

This diagram represents nine (9) sections. Use the **CENTER SQUARE**
(one section) to indicate the location of the well, if possible.



WATER EQUIVALENTS TABLE (Rounded Figures)

An acre-foot covers 1 acre of land 1 foot deep.

1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm).

1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.

1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

100 gpm pumped continuously for one year produces 160 acre-feet.

COLORADO DIVISION OF WATER RESOURCES

300 Columbine Bldg., 1845 Sherman St.
Denver, Colorado 80203THIS FORM MUST BE SUBMITTED
WITHIN 60 DAYS OF COMPLETION
OF THE WORK DESCRIBED HERE-
ON. TYPE OR PRINT IN BLACK
INK.

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 74139

RECEIVED

MAY 23 '74

WATER RESOURCES
DIVISIONWELL OWNER Inez M. & Arthur E. Sindt SW 1 1/4 of the SW 1 1/4 of Sec. 31ADDRESS R. R. 2 Sterling, Colorado 80751 T. 10 N. R. 52 W. 6 P.M.DATE COMPLETED May, 1974 HOLE DIAMETER6 3/4 in. from 0 to 310 ft. in. from to ft. in. from to ft.DRILLING METHOD RotaryCASING RECORD: Plain CasingSize 5 & kind Plastic from 0 to 170 ft.Size & kind from to ft.Size & kind from to ft.Perforated CasingSize 5 & kind Plastic from 170 to 310 ft.Size & kind from to ft.Size & kind from to ft.

GROUTING RECORD

Material CementIntervals the first 10 ft.Placement Method Mixed and poured.GRAVEL PACK: Size NoneInterval

TEST DATA

Date Tested May, 19 74Static Water Level Prior to Test 86 ft.Type of Test Pump BailerLength of Test 2 hoursSustained Yield (Metered) 15 GPMFinal Pumping Water Level 250

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	16	Gravel	XX
16	63	Shale	
63	290	Blue shale	
290	310	Shale sand	
TOTAL DEPTH <u>310</u>			

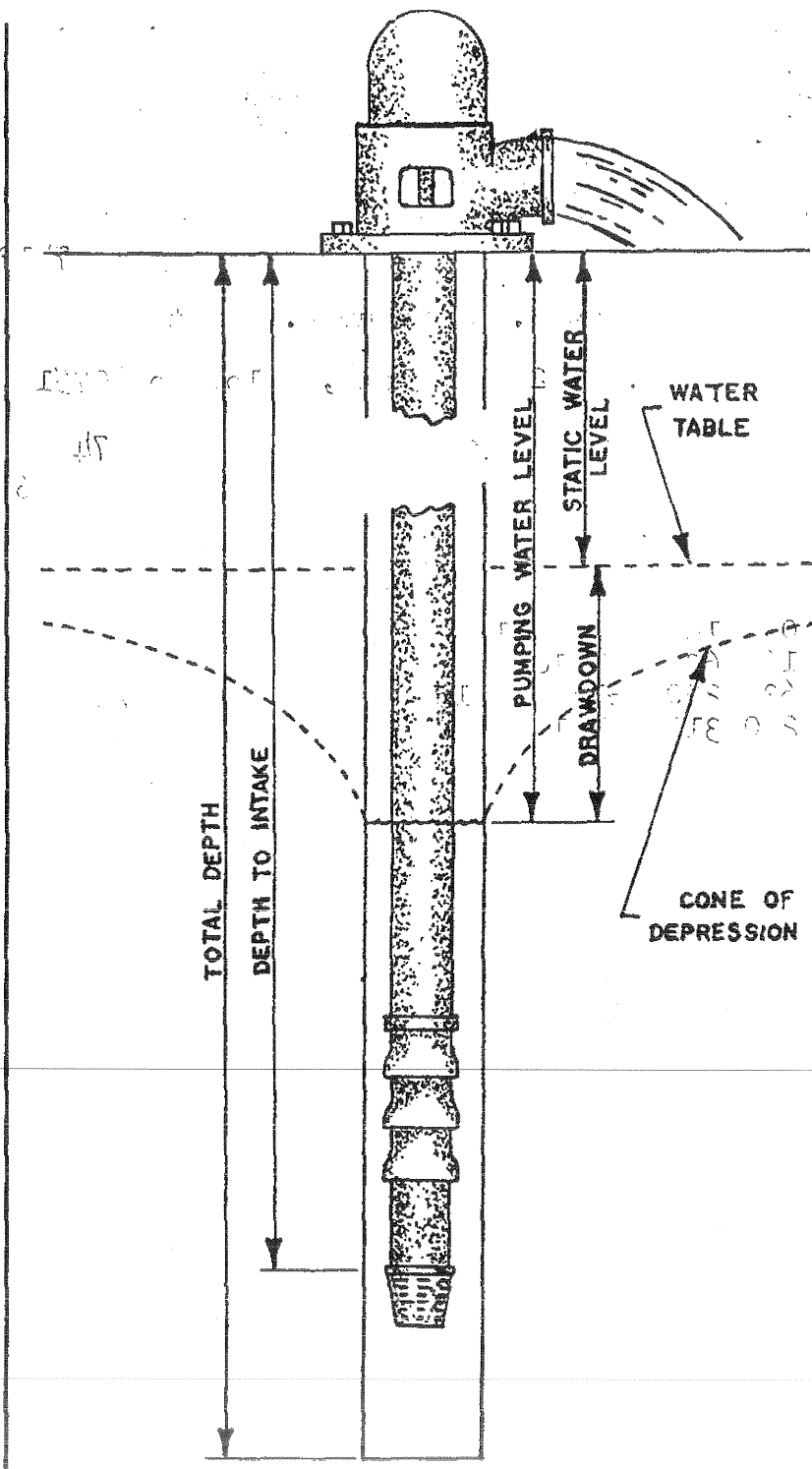
Use additional pages necessary to complete log.

PUMP INSTALLATION REPORT

Pump Make Berkeley
 Type Submersible
 Powered by Electric HP 1/2
 Pump Serial No. 7306271
 Motor Serial No. _____
 Date Installed May 3, 1974
 Pump Intake Depth 258
 Remarks _____

WELL TEST DATA WITH PERMANENT PUMP

Date Tested May 3, 1974
 Static Water Level Prior to Test 86
 Length of Test 2 Hours
 Sustained yield (Metered) _____ GPM
 Pumping Water Level 250
 Remarks _____



CONTRACTORS STATEMENT

The undersigned, being duly sworn upon oath, deposes and says that he is the contractor of the well or pump installation described hereon; that he has read the statement made hereon; knows the content thereof, and that the same is true of his own knowledge.

Signature Dennis Stewart License No. 66

State of Colorado, County of Logan SS

Subscribed and sworn to before me this 22 day of May, 19 74.

My Commission expires: June 27, 1974, 19 74

Notary Public Elsie E Stewart

RECEIVED
APR 08 '74
WATER RESOURCES
STATE ENGINEER
COLO.

PERMIT APPLICATION FORM

Application must be complete where applicable. Type or print in BLACK INK. No overstrikes or erasures unless initialed. Proper fee must be submitted with the application.

FOR: ~~(X)~~ A PERMIT TO USE GROUND WATER
(X) A PERMIT TO CONSTRUCT A WELL
~~(X)~~ A PERMIT TO INSTALL A PUMP

() REPLACEMENT FOR NO. _____

() OTHER _____

(1) APPLICANT - mailing address

NAME Inez M. Sindt &
Arthur E. Sindt

STREET _____ R. R. 2 _____

CITY Sterling Colorado 80751
(State) (Zip)

TELEPHONE NO. 368 2085

(2) LOCATION OF PROPOSED WELL

County Logan

SW ¼ of the SW ¼. Section 31

Twp. 10 N, Rng. 52 W, 6 P.M.

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 15

Average annual amount of ground water to be appropriated (acre-feet): 2

Number of acres to be irrigated: _____ None

Proposed total depth (feet): 100 ft

Aquifer ground water is to be obtained from:

Shalé

Owner's well designation Stock

GROUND WATER TO BE USED FOR:

() HOUSEHOLD USE ONLY - no irrigation (0)

() DOMESTIC (1) () INDUSTRIAL (5)

(XX) LIVESTOCK (2) () IRRIGATION (6)

() COMMERCIAL (4) () MUNICIPAL (8)

() OTHER (9) _____

(4) DRILLER

Name Stewart Drilling Co.

Street R. R. 1

City Sterling Colorado 80751
(State) (Zip)

Telephone No. 522 1454 Lic. No. 66

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 51251 / 1

Basin _____ Dist. _____

CONDITIONS OF APPROVAL

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

Approved per (3) (b) (ii). CRS148-21-45: this well to be the only well on a tract of more than 35 acres designated as that 40 acres in SW-SW-31-10W-52W-6th

APPLICATION APPROVED

I.D. 1 W.D. 64 COUNTY 38

PERMIT NUMBER **74139**

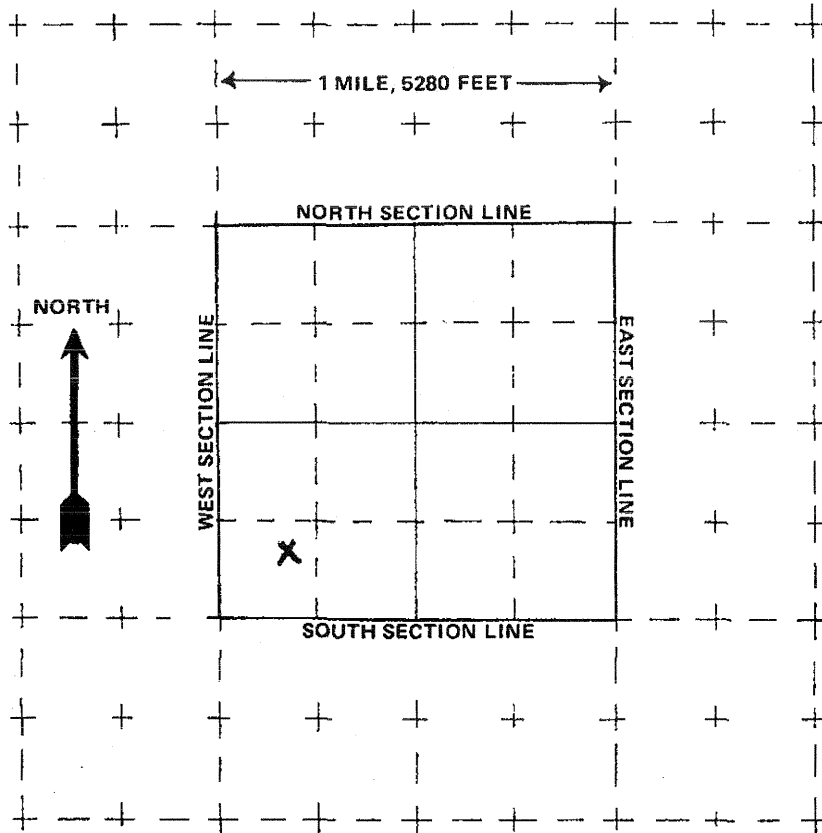
DATE ISSUED MAY 3 1974

EXPIRATION DATE MAY 3 1976

DEPUTY (STATE ENGINEER)

RV

(5) **THE LOCATION OF THE PROPOSED WELL** and the area on which the water will be used must be indicated on the diagram below. Use the **CENTER SECTION** (1 section, 640 acres) for the well location.



The scale of the diagram is 2 inches = 1 mile
Each small square represents 40 acres.

WATER EQUIVALENTS TABLE (Rounded Figures)

An acre-foot covers 1 acre of land 1 foot deep
1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm)
A family of 5 will require approximately 1 acre-foot of water per year.
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.
1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

(6) **THE WELL MUST BE LOCATED BELOW** by distances from section lines.

1288 ft. from South sec. line
(north or south)
1254 ft. from West sec. line
(east or west)

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

(7) **TRACT ON WHICH WELL WILL BE LOCATED**

No. of acres 440. Will this be
the only well on this tract? Yes

(8) **PROPOSED CASING PROGRAM**

Plain Casing

5 in. from 0 ft. to 80 ft.

_____ in. from _____ ft. to _____ ft.

Perforated casing

5 in. from 80 ft. to 100 ft.

_____ in. from _____ ft. to _____ ft.

(9) **FOR REPLACEMENT WELLS** give distance and direction from old well and plans for plugging it:

(10) **LAND ON WHICH GROUND WATER WILL BE USED:**

Owner(s): Inez M. & Arthur E. Sindt No. of acres: 440

Legal description: SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec 31, T 10N, R 52W, 6 PM, Logan County, Colorado

(11) **DETAILED DESCRIPTION** of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used.

Livestock well

(12) **OTHER WATER RIGHTS** used on this land, including wells.

Type of right

Used for (purpose)

Legal Description of land on which used

None 08115

(13) **THE APPLICANT(S) STATE(S) THAT THE INFORMATION SET FORTH HEREON IS TRUE TO THE BEST OF HIS KNOWLEDGE.**

Arthur E. Sindt

SIGNATURE OF APPLICANT(S)

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



Induction-Electrical Log

FIELD or LOCATION WELL	COMPANY <u>SINCLAIR</u>	Other Surveys <u>NIL</u>
	<u>OIL & GAS CO.</u>	Location of Well
	WELL <u>SINDT #5</u>	
	FIELD <u>WEST PADRONI</u>	
	LOCATION <u>SEC 31-10N-52W</u>	
	<u>CNW SW</u>	Elevation: D.F.: K.B.: <u>4112</u> or G.L.: <u>4102</u>
COMPANY	COUNTY <u>LOGAN</u>	
	STATE <u>COLORADO</u>	FILING No. _____

RUN No.	<u>ONE</u>								
Date	<u>1/29/61</u>								
First Reading	<u>5164</u>								
Last Reading	<u>283</u>								
Feet Measured	<u>4881</u>								
sg. Schlum.	<u>283</u>								
sg. Driller	<u>282</u>								
Depth Reached	<u>5165</u>								
Bottom Driller	<u>5158</u>								
Depth Datum	<u>GL</u>								
Fluid Nat.	<u>GEL-OIL</u>								
Cons. Visc.	<u>9.6 10.3</u>								
Fluid Resist.	<u>1.5 @ 73°F</u>	@	°F	@	°F	@	°F	@	°F
" Res. BHT	<u>0.83 @ 132°F</u>	@	°F	@	°F	@	°F	@	°F
Rmf	<u>1.0 @ 73°F</u>	<u>1.55 @ 132°F</u>	@	°F	@	°F	@	°F	@
Rmc	<u>1.1 @ 132°F</u>	@	°F	@	°F	@	°F	@	°F
" pH	<u>9.5 @</u>	@	°F	@	°F	@	°F	@	°F
" Wtr. Loss	<u>2.8 CC 30 min.</u>	CC 30 min.		CC 30 min.		CC 30 min.		CC 30 min.	
Bit Size	<u>7 7/8"</u>								
pcgs.—AM	<u>16"</u>								
MN	<u>34' 6"</u>								
IND.	<u>6FF40</u>								
Op. Rig Time	<u>1.4 HR</u>								
Truck No.	<u>1541</u>								
Recorded By	<u>KIMBALL</u>								
Witness	<u>PRICE</u>								

FOLD HERE



February 10, 2012

Carol and Stanley Fluharty
18979 County Road 50, Route 2
Sterling, CO 80751

Re: Seven Day Notice
Sindt #5
SW NE Sec. 31 T10N R52W
Logan County, Colorado

Dear Surface Owner(s):

Citation Oil & Gas Corp. has filed with the State of Colorado Oil and Gas Conservation Commission an application for permit to convert Sindt #5 well to a Salt Water Disposal well.

It is our understanding that you are the surface owner of the SW of Section 17, Township 10N, Range 52 West per a records search of the County of Logan.

If you have any questions regarding this application please contact the undersigned at 281-891-1570. It is the responsibility of you as the surface owner to notify any affected tenant of our proposed operations.

Sincerely,

A handwritten signature in dark ink that reads "Nathania Naftaly".

Nathania Naftaly
Permitting Analyst III