

Big Bend Groundwater Management District No. 5

125 South Main St. P.O. Box 7
Stafford, Kansas 67578

DISTRICT PERMIT NUMBER
CPB-18-18

Well Location: MP 32.8	NW	SW	SW	Section	Township	Range
County PAWNEE	_{1/4}	_{1/4}	_{1/4}	6	23	16W

APPLICANT:

Contact Person: RUSTY GANN
Name: MESA CORROSION CONTROL
Address: 4445 S. 74TH E. AVE
City/State/Zip Code: TULSA, OK 74145
Telephone No. 918-627-3188 EX 6186
Fax No. 918-627-2676

RECEIVED

Jan 09 2019

Big Bend GMD #5

CONTRACTOR/DRILLER:

License No. 6427
Contact Person: GREG DODSON
Name: DARLING DRILLING
Address: 3916 W. 56TH AVE
City/State/Zip Code: HUTCHINSON, KS 67502
Telephone No. 620-662-7901
Fax No. 620-662-1707

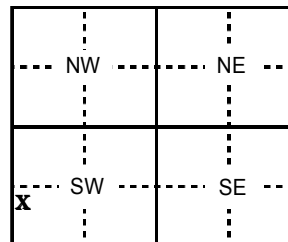
Drill Cuttings Recorded At 5 Feet Intervals? (minimum allowable) YES NO (circle one)

If "NO", What interval? _____

Drillers Log attached? YES NO (circle one)

Geophysical/Electrical logs completed: YES NO (circle one)

Geophysical/Electrical logs attached: YES NO (circle one)



Bore hole completion: Cased / Uncased

Diameter 17"
Casing material PVC SDR-21
Outside diameter of surface casing: 10.750"
Minimum wall thickness 0.511
SDR -21
Casing interval 5, 35, 75, 115, 128
Centralizer locations: 3, 40, 80, 120, 145 feet bls
Grout material NEAT CEMENT
Grout intervals 150' to 3' feet bls
Anode conductor (backfill) material: LORESCO SC-3
Anode conductor interval: 350' to 125' feet bls
Anode interval 345', TO 160' ON 10' CC feet bls

Drilling pit construction: (Mark Yes or No)

A. Hydraulic conductivity of bottom and side less than 1×10^{-7} cm.sec: YES
B. Above Ground: YES
C. Portable: YES

Number of copies of well completion form submitted to GMD #5: 1
Number of copies of geophysical/electrical logs submitted to GMD #5: 1
Number of copies of Completion (as built plan) form submitted to GMD #5: 1

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	4'	TOP SOIL			
4'	35'	BROWN CLAY			
35'	42'	COURSE GRAVEL TAN CLAY MIX			
42'	75'	MED-SMALL SAND			
75'	85'	GRAY CLAY			
85'	120'	BROWN CLAY W/STRKS OF SAND			
120'	132'	BROWN CLAY W/STRKS OF CALICHE			
132'	155'	GRAY SHALE			
155'	200'	HVY STICKY GRAY SHALE			
200'	355'	GRAY SHALE			

Date Submitted: 1/7/2019

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
July 2014

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 35587

Name: Rose Rock Midstream Crude, L.P.

Address 1: TWO WARREN PLACE

Address 2: 9120 S. YALE, SUITE 1500

City: TULSA State: OK Zip: 74136 + _____

Contact Person: JOHN CHRISTENSEN

Phone: (405) 945-6337

CONTRACTOR: License # 6427

Name: DARLING DRILLING

Wellsite Geologist: JOHN HILDEBRAND

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SLOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

<u>11/1/2018</u>	<u>11/2/2018</u>	<u>11/3/2018</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: MP 32.8

NW_NW_SW_SW Sec. 6 Twp. 23 S. R. 16 East West

1,295 Feet from North / South Line of Section

13 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: 38.076531, Long: -99.131878
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: PAWNEE

Lease Name: MP 32.8 Well #: 1

Field Name: _____

Producing Formation: _____

Elevation: Ground: 2060 Kelly Bushing: _____

Total Vertical Depth: 355' Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 150 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 1500 ppm Fluid volume: 226 bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: UNDERGROUND CAVERN STABILIZATION, LLC

Lease Name: UCS HUTCHINSON FACILITY License #: KS-05-155-002

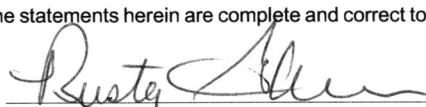
Quarter SW Sec. 14 Twp. 24 S. R. 6 East West

County: RENO Permit #: 147-1175

INSTRUCTIONS: The original form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. If confidentiality is requested and approved, side two of this form will be held confidential for a period of 2 years. Rules 82-3-130, 82-3-106 and 82-3-107 apply. Drill Stem Test, Cement Tickets and Geological Well Report must be attached.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: 

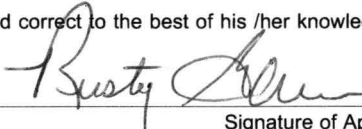
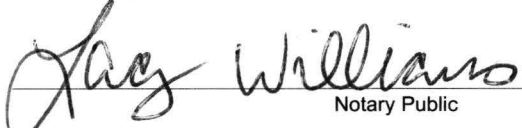
Title: PROJECT MGR Date: 1/4/2019

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
CLOSURE OF SURFACE PIT**

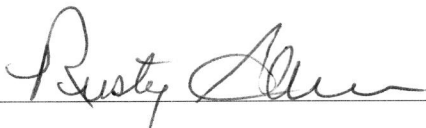
Form CDP-4
July 2014
Form must be Typed

Operator Name: ROSE ROCK MIDSTREAM CRUDE, L.P.	License Number: 35587
Operator Address: TWO WARREN PLACE, SUITE 1500, TULSA, OK 74136	
Contact Person: JOHN CHRISTENSEN	Phone Number: (405) 945 - 6337
Permit Number (API No. if applicable): CPB-18-18	Lease Name & Well No.: MP 32.8
Type of Pit: <input type="checkbox"/> Emergency Pit <input type="checkbox"/> Burn Pit <input type="checkbox"/> Settling Pit <input checked="" type="checkbox"/> Drilling Pit <input type="checkbox"/> Workover Pit <input type="checkbox"/> Haul-Off Pit	Pit Location (QQQQ): NW _ NW _ SW _ SW Sec. 6 Twp. 23 R. 16 <input type="checkbox"/> East <input checked="" type="checkbox"/> West 1295 Feet from <input type="checkbox"/> North / <input checked="" type="checkbox"/> South Line of Section 13 Feet from <input type="checkbox"/> East / <input checked="" type="checkbox"/> West Line of Section PAWNEE _____ County
Date of closure: <u>11/2/2018</u>	
Was an artificial liner used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If no, how were the sides and bottom sealed to prevent downward migration of the pit contents?	
Abandonment procedure of pit: WASTE WAS IN A STEEL CONTAINER, AND HAULED TO LICENSED FACILITY.	
The undersigned hereby certifies that he / she is <u>RUSTY GANN</u> for <u>MESA CORROSSION CONTROL</u> (Co.), a duly authorized agent, that all information shown hereon is true and correct to the best of his /her knowledge and belief.	
 _____ Signature of Applicant or Agent	
Subscribed and sworn to me on this <u>4TH</u> day of <u>JANUARY</u> , 2019	
<div style="border: 2px solid black; padding: 5px; width: fit-content;"> LACY WILLIAMS Notary Public, State of Oklahoma Commission # 16008423 My Commission Expires August 31, 2020 </div>	 _____ Notary Public
My Commission Expires: <u>Aug. 31. 2020</u>	

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form CDP-5
July 2014
Form must be Typed

EXPLORATION & PRODUCTION WASTE TRANSFER

Operator Name: ROSE ROCK MIDSTREAM CRUDE, L.P.	License Number: 35587
Operator Address: TWO WARREN PLACE, SUITE 1500	
Contact Person: JOHN CHRISTENSEN	Phone Number: (405) 945 - 6337
Permit Number (API No. if applicable): CPB-18-18	Lease Name: MP 32.8
Source of Waste: <input type="checkbox"/> Emergency Pit <input type="checkbox"/> Settling Pit <input type="checkbox"/> Workover Pit <input type="checkbox"/> Drilling Pit <input type="checkbox"/> Burn Pit <input type="checkbox"/> Haul-off Pit <input checked="" type="checkbox"/> Steel Pit <input type="checkbox"/> Spill / Escape <input type="checkbox"/> Dike	Well Number: 1 Source Location (QQQQ): NW - NW - SW - SW Sec. 6 Twp. 23 R. 16 <input type="checkbox"/> East <input checked="" type="checkbox"/> West 1295 Feet from <input type="checkbox"/> North / <input checked="" type="checkbox"/> South Line of Section 13 Feet from <input type="checkbox"/> East / <input checked="" type="checkbox"/> West Line of Section GPS Location: Lat: 38.076531, Long: -99.131878 <small>(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)</small> Datum: <input type="checkbox"/> NAD27 <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> WGS84 County: PAWNEE
No Waste to be Hauled: <input type="checkbox"/> (If checked, provide an explanation as to why no waste was hauled in the Comments area.)	
Type of waste to be disposed: <input checked="" type="checkbox"/> Fluid <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Mud / Cuttings <input type="checkbox"/> Other: _____	
Amount of waste: _____ No. of loads 226 Barrels _____ Tons _____ YDS	
Destination of waste: <input type="checkbox"/> Reserve Pit <input type="checkbox"/> Haul Off Pit <input checked="" type="checkbox"/> Disposal Well <input type="checkbox"/> Lease Road <input type="checkbox"/> Dike / Berm <input type="checkbox"/> Other: _____	
If waste is transferred to another reserve pit, is the lease active? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Location of Waste Disposal: Destination Out of State: <input type="checkbox"/> (If checked, provide the location of where the waste was hauled in the Comments area.)	
Date of Waste Transfer: 11/2/2018	
Operator Name: UNDERGROUND CAVERN STABILIZATION, LLC License No.: KS-05-155-002	
Lease Name: UCS HUTCHINSON FACILITY Sec. 14 Twp. 24 R. 6 <input type="checkbox"/> East <input checked="" type="checkbox"/> West	
Docket No./API No.: CPB-18-18 County: RENO	
Comments:	
UNDER PENALTY OF PERJURY I HEREBY ATTEST THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.	
Date: 1/4/2019	Signature:  Title: PROJECT MGR

WATER WELL RECORD Form WWC-5

Division of Water Resources App. No.

CPB-18-18

MP 32.8

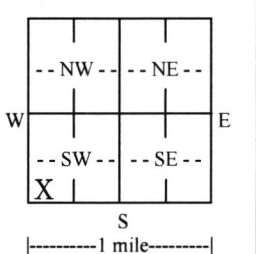
Original Record Correction Change in Well Use

Well ID

Table with 5 columns: 1 LOCATION OF WATER WELL: County: PAWNEE, Fraction NW 1/4 NW 1/4 SW 1/4 SW 1/4, Section Number 6, Township Number T 23 S, Range Number R 16 E W

2 WELL OWNER: Last Name: JOHN First: CHRISTES Street or Rural Address where well is located (if unknown, distance and direction from nearest town or intersection): If at owner's address, check here: FROM THE CORNER OF F RD AND 130TH RD GO N. ON 130TH RD APPROX 0.25 MILES TO LOCATION ON THE EAST

3 LOCATE WELL WITH "X" IN SECTION BOX: N



4 DEPTH OF COMPLETED WELL: Depth(s) Groundwater Encountered: 1) ... ft. 2) ... ft. 3) ... ft., or 4) Dry Well WELL'S STATIC WATER LEVEL: ... ft. below land surface, measured on (mo-day-yr) ... ft. above land surface, measured on (mo-day-yr) ... ft. Pump test data: Well water was ... ft. after ... hours pumping ... gpm Well water was ... ft. after ... hours pumping ... gpm Estimated Yield: ... gpm Bore Hole Diameter: ... in. to ... ft. and ... in. to ... ft.

5 Latitude: 38.076531 (decimal degrees) Longitude: -99.131878 (decimal degrees) Horizontal Datum: WGS 84 NAD 83 NAD 27 Source for Latitude/Longitude: GPS (unit make/model: ... (WAAS enabled? Yes No) Land Survey Topographic Map Online Mapper: GOOGLE EARTH

6 Elevation: 2060 ft. Ground Level TOC Source: Land Survey GPS Topographic Map Other

7 WELL WATER TO BE USED AS: 1. Domestic: Household Lawn & Garden Livestock Irrigation Feedlot Industrial 5. Public Water Supply: well ID 6. Dewatering: how many wells? 7. Aquifer Recharge: well ID 8. Monitoring: well ID 9. Environmental Remediation: well ID Air Sparge Soil Vapor Extraction Recovery Injection 10. Oil Field Water Supply: lease 11. Test Hole: well ID Cased Uncased Geotechnical 12. Geothermal: how many bores? a) Closed Loop Horizontal Vertical b) Open Loop Surface Discharge Inj. of Water 13. Other (specify): CATHODIC PROTECTION

Was a chemical/bacteriological sample submitted to KDHE? Yes No If yes, date sample was submitted: Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other CASING JOINTS: Glued Clamped Welded Threaded Casing diameter 10 in. to 150 ft., Diameter in. to ft., Diameter in. to ft. Casing height above land surface in. Weight 10.805 lbs./ft. Wall thickness or gauge No. 0.511

TYPE OF SCREEN OR PERFORATION MATERIAL: Steel Stainless Steel Fiberglass PVC Brass Galvanized Steel Concrete tile None used (open hole) Other (Specify) SCREEN OR PERFORATION OPENINGS ARE: Continuous Slot Mill Slot Gauze Wrapped Torch Cut Drilled Holes Other (Specify) Louvered Shutter Key Punched Wire Wrapped Saw Cut None (Open Hole) SCREEN-PERFORATED INTERVALS: From ft. to ft., From ft. to ft., From ft. to ft. GRAVEL PACK INTERVALS: From ft. to ft., From ft. to ft., From ft. to ft.

9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other Grout Intervals: From ft. to ft., From ft. to ft., From ft. to ft.

Nearest source of possible contamination: Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well/Gas Well Other (Specify) Direction from well? Distance from well? ft.

Table with 5 columns: 10 FROM TO LITHOLOGIC LOG FROM TO LITHO. LOG (cont.) or PLUGGING INTERVALS. Rows include TOP SOIL, BROWN CLAY, COURSE GRAVEL/TAN CLAY MIX, MED-SMALL SAND, GRAY CLAY, BROWN CLAY W/STRKS OF SAND, BROWN CLAY W/STRKS OF CALICHE, GRAY SHALE, HVY STICKY GRAY SHALE. Notes: ...

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo-day-year) .11/2/2018. and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 6427. This Water Well Record was completed on (mo-day-year) .11/2/2018. under the business name of MESA Signature

Operator Name: Rose Rock Midstream Crude, L.P. Lease Name: MP 32.8 Well #: 1
Sec. 6 Twp. 23 S. R. 16W East West County: PAWNEE

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	17"	10"	SDR-21	150'	NEAT	150	6% GEL 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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WELL COMPLETION (FORM ACO-1)

Instructions

General Instructions.

1. The form must be typed.
2. All horizontal wellbore completions are required to attach the additional information with their ACO-1 as listed below in Section 11.

Section 0: Confidentiality.

- 0a. **Confidentiality Requested.** Mark the box to indicate if confidentiality is requested.

Section 1: Operator/Well Information.

- 1a. **License #.** Enter the operator's license number.
- 1b. **Name.** Enter the operator's full name as it appears on the operator's license.
- 1c. **Address.** Enter the operator's mailing address (street or PO Box).
- 1d. **City/State/Zip.** Enter the operator's city, state, and zip code.
- 1e. **Contact Person.** Enter the name of the individual who will be the operator's contact person, should Conservation Staff need to contact the operator about the Form. The contact person may be the operator or the operator's agent.
- 1f. **Phone.** Enter the phone number of the contact person listed in "1e" above.
- 1g. **Contractor License #.** Enter the Drilling Contractor's license number. The drilling contractor may be the operator or the operator's agent.
- 1h. **Contractor Name.** Enter the name of the drilling contractor as it appears on the drilling contractor's operator license.
- 1i. **Wellsite Geologist.** Enter the name of the wellsite geologist witnessing the completion work.
- 1j. **Purchaser.** Enter the name of the purchaser of the oil and/or gas produced from the subject well.
- 1k. **Designate Type of Completion.** Mark the appropriate box to indicate if it is a new well, re-entry, or workover. Also mark the appropriate box(es) to indicate the type of completion. Multiple boxes may be marked.
- 1L. **Old Well Information. Only complete this section if the subject well is a workover or reentry.**
 - 1l(1). **Operator.** Enter the name of the last operator of the subject wellbore, prior to workover or re-entry operations.
 - 1l(2). **Well Name.** Enter the name under which the subject well was last operated.
 - 1l(3). **Original Completion Date.** Enter the date on which the subject well was originally completed.
 - 1l(4). **Original Total Depth.** Enter the original total depth of the subject well.
 - 1l(5). **Deepening, Re-perforate, Convert to Enhanced Recovery/ Saltwater Disposal/Gas Storage.** Mark the appropriate box(es) to indicate whether, through workover/re-entry operations, the well has been deepened, re-perforated, and/or converted to an enhanced recovery or saltwater disposal well. Multiple boxes may be marked. For each box that is marked, enter the corresponding permit number to the right of the box.
- 1m. **Spud Date or Recompletion Date.** For new wells, enter the date on which the well was spud. Otherwise, enter the date on which current recompletion operations were commenced.
- 1n. **Date Reached TD.** Enter the date on which the operator reached total depth.
- 1o. **Completion Date or Recompletion Date.** For new wells, enter the date on which the new well was completed. Otherwise, enter the date on which current recompletion operations were finished.
- 1p. **API No. Enter the API Number.** This number is subject to change. Staff will contact the operator if major changes are made to the subject well's API Number.
- 1q. **Spot Location.** Enter the geographic location of the subject well by $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$, Section, Township, and Range. Mark the appropriate box to indicate if the range is east or west of the Sixth Principal Meridian.
- 1r. **Footage Location from Section Lines.**
 - 1r(1). Enter the number of feet the subject well is located from the South or North section line. Circle which section line the measurement was taken from.

- 1r(2). Enter the number of feet the subject well is located from the East or West section line. Circle which section line the measurement was taken from.

- 1s. **Footages Calculated From Nearest Outside Section Corner.** Mark the appropriate box indicating the outside section corner nearest the location of the well.

- 1s(1). Enter GPS latitude
- 1s(2). Enter GPS Longitude
- 1s(3). Enter Datum

- 1t. **County.** Enter the county in which the well is located.
- 1u. **Lease Name/Well Number.** Enter the name of the lease and the well number.
- 1v. **Field Name.** List the name of the field where the well is located. Field names are available from KGS at <http://www.kgs.ku.edu/Magellan/Field/index.html>, or Independent Oil & Gas Service at <http://www.iogsi.com>.
- 1w. **Producing Formation.** Enter the name of the geologic formation from which the well is producing.
- 1x. **Elevation.**
 - 1x(1). **Ground.** Enter the elevation in feet above sea level for the well's location.
 - 1x(2). **Kelly Bushing.** Enter the elevation in feet above sea level of the Kelly bushing during drilling operations.
- 1y. **Total Vertical Depth.** Enter the total vertical depth of the well.
- 1z. **Plug Back Total Depth.** Enter the total depth of the plug back in the well.
 - 1za. **Amount of Surface Pipe Set and Cemented.** Enter the depth to which surface pipe is set and cemented.
 - 1zb. **Multiple Stage Cementing Collar Used.**
 - 1zb(1). Mark the box to show if a multiple stage cementing collar was used to complete/recomplete the well.
 - 1zb(2). If a multiple stage cementing collar was used, fill in the blank with the depth at which it was set.
- 1cc. **Alternate II Completion.** If the subject well is an Alternate II Completion, enter the depth to which cement was circulated and the number of sacks of cement used.

Section 2: Drilling Fluid Management Plan.

- 2a. **Chloride Content.** Enter the chloride content in parts per million of reserve pit fluids.
- 2b. **Fluid Volume.** Enter the volume in barrels of reserve pit fluids used.
- 2c. **Dewatering Method Used.** Enter the dewatering method used at the well during drilling operations.
- 2d. **Location of Fluid Disposal if Hauled Offsite.**
 - 2d(1). **Operator Name.** Enter the name of the operator who disposed of the drilling fluids.
 - 2d(2). **Lease Name.** Enter the name of the lease at which the drilling fluids were disposed.
 - 2d(3). **License Number.** Enter the license number of the operator who disposed of the drilling fluids.
 - 2d(4). **Geographic Location.** Enter the geographic location of the lease on which drilling fluids were disposed by $\frac{1}{4}$, Section, Township, and Range. Mark the box to indicate if the Range is East or West of the Sixth Principal Meridian.
 - 2d(5). **County.** Enter the county in which the fluid disposal is located.
 - 2d(6). **Permit Number.** If the fluid will be hauled offsite and injected into an enhanced recovery or disposal well, enter the permit number under which the operator is authorized to conduct injection operations into the well.

Section 3: Verification.

- 3a. **Signature.** The operator or the operator's agent must sign the Well Completion Form.
- 3b. **Title.** The title, with respect to the operator, of the individual signing the form.
- 3c. **Date.** Enter the date on which the form is completed.

Section 4: Operator and Well Information.

- 4a. **Operator Name.** Enter the operator's full name as it appears on the operator's license.
- 4b. **Lease Name/Well Number.** Enter the lease name and well number for the well.
- 4c. **Geographic Location.** Enter the location of the well by Section, Township, and Range, and mark the box to indicate if the Range is East or West of the Sixth Principal Meridian.
- 4d. **County.** Enter the name of the county in which the well is located.

Section 5: Logs, Samples, and Test Reporting.

- 5a. **Drill Stem Tests.** Mark the box to indicate whether drill stem tests were taken. If drill stem tests were taken, additional sheets must be attached to the ACO-1.
- 5b. **Samples Sent to Geological Survey.** Mark the box to indicate if geologic samples were sent to KGS.
- 5c. **Cores Taken.** Mark the box to indicate if cores were taken.
- 5d. **Electric Log Run.** Mark the box to indicate if electric log(s) were run on the subject well.
- 5e. **List All Electric Logs Run.** If electric logs were run on the subject well, list all of the electric logs conducted.
- 5f. **Formation (Top), Depth, and Datum.** Mark the appropriate "Log" or "Sample" box, or both boxes, to indicate whether the formation information is derived from a driller's log or geologic samples. Enter the name of each penetrated producing or storage formation, the formation top, and the datum of the formation top. The formation datum is the distance from the formation top to the mean sea level. It may be a positive or a negative number.

Section 6: Casing Record.

- 6a. **New or Used.** Mark the box to indicate if the well's casing is new or had been previously used.
- 6b. **Casing Strings Used.** For each separate string of casing used, enter the following information:
 - 6b(1). **Purpose of String.** The purpose of the casing string.
 - 6b(2). **Size Hole Drilled.** The size of hole drilled for the casing string.
 - 6b(3). **Size Casing Set.** The outside diameter of the casing.
 - 6b(4). **Weight.** The weight of the casing set, expressed in pounds per foot.
 - 6b(5). **Setting Depth.** The depth to which the casing string is set.
 - 6b(6). **Type of Cement.** The type of cement used to set the casing string.
 - 6b(7). **# Sacks Used.** The number of sacks of cement used to set the casing string.
 - 6b(8). **Type and Percent Additives.** The type and percent additives to the cement used to set the casing string.

Section 7: Additional Cementing/Squeeze Record.

- 7a. **Purpose.** Mark the blank(s) indicating the purpose of the additional cementing/squeeze. Mark all that apply.
- 7b. **Depth Top Bottom.** Enter the depth of the additional cementing from top to bottom.
- 7c. **Type of Cement.** Enter the type of cement used for the additional cementing.
- 7d. **Number of Sacks Used.** Enter the number of sacks used for the additional cementing.
- 7e. **Type and Percent Additives.** Enter the type and percent of additives to the additional cementing.
- 7f. **Three Hydraulic Fracturing Questions.** Mark the appropriate box for each question.

Section 8: Perforation, Acid, Fracture, Shot, and Cement Squeeze Record.

For each set of perforations in the well, enter the following information:

- 8a. **Shots per foot.** Enter the number of perforations per foot.
- 8b. **Perforation Record - Bridge Plugs Set/Type & Specific Footage of Each Interval Perforated.** Enter the type of bridge plugs, the depth the bridge plugs are set for each interval perforated, and the depth of each perforated interval.
- 8c. **Acid, Fracture, Shot, Cement Squeeze Record.** Enter the amount and kind of material used for any acid, fracture, or shot treatment, and any cement squeeze at each perforation interval.

- 8d. **Depth.** Enter the depth of the acid, fracture, shot, or cement squeeze at each perforation interval.

Section 9: Miscellaneous.

- 9a. **Tubing Record.**
 - 9a(1). **Size.** Enter the size of tubing set in the subject well.
 - 9a(2). **Set at.** Enter the depth at which the tubing is set in the subject well.
 - 9a(3). **Packer at.** Enter the depth at which the tubing packer is set in the subject well.
- 9b. **Liner Run.** Mark the appropriate box to indicate if a liner is in the subject well.
- 9c. **Date of First or Resumed Production, SWD, or ENHR.** For newly completed wells, enter the date of first production, saltwater disposal, or enhanced recovery operations. For workovers or re-entries, enter the date of resumed production, saltwater disposal, or enhanced recovery operations.
- 9d. **Producing Method.** Mark the appropriate box to indicate by which method the subject well is producing: flowing, pumping, gas lift, or other. If the "other" box is marked, write in a brief explanation of the producing method.
- 9e. **Estimated Production Per 24 Hours.** Enter the following information regarding the estimated production from the subject well over a 24-hour period:
 - 9e(1). **Oil Bbls.** Enter the estimated number of barrels oil produced from the subject well in a 24-hour period.
 - 9e(2). **Gas Mcf.** Enter the estimated amount of gas produced from the subject well in a 24-hour period, expressed in thousands of cubic feet.
 - 9e(3). **Water Bbls.** Enter the estimated number of barrels water produced from the subject well in a 24-hour period.
 - 9e(4). **Gas-Oil Ratio.** Enter the gas-oil ratio for production from the subject well.
 - 9e(5). **Gravity.** The API gravity (density) of produced oil, measured in degrees.
 - 9e(6). **Disposition of Gas.** Mark the appropriate box to indicate the disposition of any gas produced from the subject well as vented, sold, or used on lease. If the gas is vented, you must submit an ACO-18 with the ACO-1.
 - 9e(7). **Method of Completion; Production Interval.** Mark the appropriate box to indicate if the production interval in the subject well is open hole, perforated, dually completed, commingled, or other. If the "other" box is marked, specify the method of completion in the blank provided. If the subject well is producing from commingled zones, you must file an ACO-4 form. If the subject well is dually completed, you must file an ACO-5 form.
 - 9e(8). **Production Interval.** Enter the footages where the wellbore is perforated.

Section 10: Hydraulic Fracturing Fluid Product Component Information Disclosure

Section 10 must be completed if Question 3 in Section 7(f) was marked "No". In other words, Section 10 must be completed for each hydraulic fracturing treatment using more than 350,000 gallons of base fluid, if the operator has not submitted all of the required information to FracFocus. "Hydraulic fracturing treatment" means all stages in a well completion utilizing hydraulic fracturing fluid.

- 10a. **Last Fracture Date.** Enter the date on which the operator concluded fracturing at the well.
- 10b. **County.** Enter the county where the well is located.
- 10c. **API Number.** Enter the API number of the well.
- 10d. **Operator Name.** Enter the operator's full name as it appears on the operator's license.
- 10e. **Well Name and Number.** Enter the well name and well number.
- 10f. **Latitude.** Enter the GPS latitude for the well.
- 10g. **Longitude.** Enter the GPS longitude for the well.
- 10h. **Datum.** Provide the horizontal reference datum used with the GPS reading (NAD 27, NAD 83, WGS 84).
- 10i. **Production Type.** Describe the type of completion, as listed in section 1k on the first page of the ACO-1.
- 10j. **True Vertical Depth (TVD).** Enter the true vertical depth of the well.

- 10k. **Total Base Fluid Volume (gal).** Enter the volume in gallons the total base fluid used.
- 10l. **Hydraulic Fracturing Fluid Composition.**
 10l(1) through 10l(8) must be provided for each base fluid, proppant, and chemical constituent used in each hydraulic fracturing treatment, unless it is the incidental result of a chemical process or a naturally occurring material that becomes part of the fluid during the hydraulic fracturing treatment. Fluids/proppants/chemical constituents subject to 29 CRF 1910.1200(i) appear on material safety data sheets (MSDS), and must be listed at the top of the page. All other fluids/proppants/chemical constituents must be listed at the bottom.
- 10l(1). **Trade Name.** Enter the trade name for each fluid/proppant/chemical constituent.
- 10l(2). **Supplier.** Enter the supplier name for each fluid/proppant/chemical constituent.
- 10l(3). **Purpose.** Enter the purpose of each fluid/proppant/chemical constituent.
- 10l(4). **Ingredients.** Enter the ingredients of each fluid/proppant/chemical constituent. If the ingredients are a trade secret, enter "Trade Secret" in this section.
- 10l(5). **Chemical Abstract Service Number (CAS #).** Enter the CAS # for the fluid/proppant/chemical constituent.
- 10l(6). **Maximum Ingredient Concentration in Additive (% by mass).** Enter the maximum concentration, as part of the additive, by percent mass, of each proppant/chemical constituent. That is, exclude the base fluid from the percent mass calculation. Enter "N/A" for the base fluid. Enter a percentage in this column for each other proppant/constituent.
- 10l(7). **Maximum Ingredient Concentration in HF Fluid (% by mass).** Enter the maximum concentration, as part of the hydraulic fracturing fluid, of each fluid/proppant/chemical constituent. In other words, include the base fluid in the percent mass calculation. Enter a percentage for the base fluid, and also for each proppant and other constituent.
- 10l(8). **Authorized Representative's Name, Address, and Phone Number.** For any fluid/proppant/chemical constituent labeled a "Trade Secret" in 10L(4), list the name, authorized representative, mailing address, and phone number of the party claiming the trade secret. If the fluid/proppant/chemical constituent is not a trade secret, this section may be left blank.
- 10m. **Non-MSDS Data.** For non-MSDS fluids/proppants/constituents, enter the data for 10l(1) through 10l(8) here.
3. All operators must certify that the information contained on the plat depicting the well as drilled is accurate. Also, all operators must retain the well's completion information depicting how the wellbore was perforated for the life of the well and make it available upon Commission request.

Section 11: Information to attach to the ACO-1 for Mississippi horizontal wellbores

1. Attach a directional survey indicating the final path of the horizontal wellbore.
2. Attach a plat map depicting the well as it is drilled.
 - a. For horizontal wellbores completed open hole, the plat must depict the surface location, the point at which the wellbore encounters the producing formation (depth and distance from the nearest lease or unit boundary line), any isolation packers and the terminus of the wellbore (depth and distance from the nearest lease or unit boundary line). The lease and unit boundaries must be clearly depicted. Include GPS latitude and longitude readings for each point and specify which GPS planar projection was used to determine any footages listed on the map.
 - b. For cased horizontal wellbores, upload a plat that shows the well as it is drilled, including the surface location, the point the wellbore enters the producing formation (depth and distance from the nearest lease or unit boundary line), the location of the first perforation (depth and distance from the nearest lease or unit boundary line), the location of the last perforation (depth and distance from the nearest lease or unit boundary line), and the terminus of the wellbore (depth and distance from the nearest lease or unit boundary line). The lease and unit boundaries must be clearly depicted. Include GPS latitude and

Confidentiality Requested: 0a

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
July 2014

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____ 1a

Name: _____ 1b

Address 1: _____ 1c

Address 2: _____ 1c

City: _____ 1d State: _____ 1d Zip: _____ 1d + _____ 1d

Contact Person: _____ 1e

Phone: (_____ 1f) _____ 1f

CONTRACTOR: License # _____ 1g

Name: _____ 1h

Wellsite Geologist: _____ 1i

Purchaser: _____ 1j

Designate Type of Completion: _____ 1k

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____ 1l (1)

Well Name: _____ 1l (2)

Original Comp. Date: _____ 1l (3) Original Total Depth: _____ 1l (4)

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer

1l (5)

- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

_____ 1m _____ 1n _____ 1o

Spud Date or Date Reached TD Completion Date or

Recompletion Date Recompletion Date

API No. 15 - _____ 1p

Spot Description: _____ 1q

_____ 1q - - - - - Sec. _____ 1q Twp. _____ 1q S. R. _____ 1q East West

_____ 1r (1) Feet from North / South Line of Section

_____ 1r (2) Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

_____ 1s NE NW SE SW

GPS Location: Lat: _____ 1s (1) _____, Long: _____ 1s (2) _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84 _____ 1s (3)

County: _____ 1t

Lease Name: _____ 1u Well #: _____ 1u

Field Name: _____ 1v

Producing Formation: _____ 1w

Elevation: Ground: _____ 1x (1) Kelly Bushing: _____ 1x (2)

Total Vertical Depth: _____ 1y Plug Back Total Depth: _____ 1z

Amount of Surface Pipe Set and Cemented at: _____ 1aa Feet

Multiple Stage Cementing Collar Used? Yes No _____ 1bb (1)

If yes, show depth set: _____ 1bb (2) Feet

If Alternate II completion, cement circulated from: _____ 1cc

feet depth to: _____ 1cc w/ _____ 1cc _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ 2a ppm Fluid volume: _____ 2b bbls

Dewatering method used: _____ 2c

Location of fluid disposal if hauled offsite:

Operator Name: _____ 2d (1)

Lease Name: _____ 2d (2) License #: _____ 2d (3)

Quarter _____ 2d (4) Sec. _____ 2d (4) Twp. _____ 2d (4) S. R. _____ 2d (4) East West

County: _____ 2d (5) Permit #: _____ 2d (6)

INSTRUCTIONS: The original form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. If confidentiality is requested and approved, side two of this form will be held confidential for a period of 2 years. Rules 82-3-130, 82-3-106 and 82-3-107 apply. Drill Stem Test, Cement Tickets and Geological Well Report must be attached.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: _____ 3a

Title: _____ 3b Date: _____ 3c

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

Operator Name: 4a Lease Name: 4b Well #: _____

Sec. 4c Twp. 4c S. R. 4c East West County: 4d

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No 5a <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No 5b Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No 5c Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No 5d List All E. Logs Run: <div style="text-align: center;">5e</div>	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum <div style="text-align: center;">5f</div>
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used 6a							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
6b (1)	6b (2)	6b (3)	6b (4)	6b (5)	6b (6)	6b (7)	6b (8)

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose: 7a	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	7b	7c	7d	7e

- 7f** 1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
8a	8b	8c	8d

TUBING RECORD:	Size: 9a (1)	Set At: 9a (2)	Packer At: 9a (3)	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No 9b
Date of First, Resumed Production, SWD or ENHR. 9c		Producing Method: 9d <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____		
Estimated Production Per 24 Hours	Oil Bbls. 9e (1)	Gas Mcf 9e (2)	Water Bbls. 9e (3)	Gas-Oil Ratio 9e (4)
				Gravity 9e (5)

DISPOSITION OF GAS: 9e (6) <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: 9e (7) <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: 9e (8) _____ _____
---	--	--

COPELAND

Acid & Cement

BURRTON, KS (620) 463-5161
 GREAT BEND, KS (620) 793-3366
 FAX (620) 463-2104 FAX (620) 793-3536

POST OFFICE BOX 438
 HAYSVILLE, KS 67060
 (316) 524-1225
 (316) 524-1027 FAX

Invoice

INVOICE NUMBER:
C46553-IN

BILL TO:

**MESA QUALITY FOCUSED
 SPECIALTY CONSTRUCTION
 PO BOX 52608
 TULSA, OK 74152**

LEASE: ROSE ROCK 32.2 MILE POST 32

DATE	ORDER	SALESMAN	ORDER DATE	PURCHASE ORDER	SPECIAL INSTRUCTIONS	
10/31/2018	C46553		10/31/2018	10-18-0581 MILE POST 32	NET 30	
QUANTITY	U/M	ITEM NO./DESCRIPTION		D/C	PRICE	EXTENSION
25.00	MI	MILEAGE CEMENT PUMP TRUCK		20.00	4.00	80.00
1.00	EA	PUMP CHARGE-SURFACE PIPE		20.00	1,100.00	880.00
150.00	SK	COMMON CEMENT		20.00	12.75	1,530.00
150.00	EA	BULK CHARGE		20.00	1.25	150.00
176.25	MI	BULK TRUCK - TON MILES		20.00	1.10	155.10
REMIT TO: P.O. BOX 438 HAYSVILLE, KS 67060		COP		Net Invoice:		2,795.10
RECEIVED BY _____		FUEL SURCHARGE IS NOT TAXABLE AND IS ADDED TO MILEAGE, PUMP AND OR DELIVERY CHARGES ONLY.		PAWCO Sales Tax:		237.58
		NET 30 DAYS		Invoice Total:		3,032.68

There will be a charge of 1.5% "per month" (18% annual rate) on all accounts over 30 days past due.



FIELD ORDER N^o C 46553

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 10-31 2018

IS AUTHORIZED BY: Mesa Products (NAME OF CUSTOMER)

Address _____ City _____ Mile Post _____ State _____

To Treat Well As Follows: Lease Rose Rock Well No. 3202 Customer Order No. 10-18-0581

Sec. Twp. Range _____ County Pawnee State KS

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

Well Owner or Operator

By

Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT
2	25	Mileage Pump Truck	4 ⁰⁰	100 ⁰⁰
2		Pump Charge - Surface Pipe		1100 ⁰⁰
2	150	Sacks Common Cement	12 ⁷⁵	1912 ⁵⁰
2	150	Bulk Charge	1 ²⁵	187 ⁵⁰
2		Bulk Truck Miles $7.05 \times 25 = 176.25 \text{ M}$	1 ¹⁰	193 ⁸⁸
		Process License Fee on _____ Gallons		
		TOTAL BILLING	20	3493⁸⁸

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

Copeland Representative Greg L.

Station GB

Remarks _____

Greg
Well Owner, Operator or Agent
- 698.78
2795.10

NET 30 DAYS

LEASE WORK
CONTRACT PUMPING

TANK TRUCK
SERVICE

GRESSEL OIL FIELD SERVICE, L.L.C.

Post Office Box 438
Haysville, Kansas 67060
Phone: (316) 524-1225
Fax (316) 524-1027

Post Office Box 607
Burton, Kansas 67020
Phone: (620) 463-5161

Date 10-31 2018

MESA QUALITY FOCUSED
SPECIALTY CONSTRUCTION

Company P.O. BOX 52608 TULSA, OK 74152

Address PAWNEE CO, KANSAS No 27454

Lease ROSE ROCK 32.2 MILE POST 32 PO# 10-18-0581

Description of Work

SUCK UP CUTTINGS and mud from drilling procedure.

165 / # 245

4 1/2 hrs.

MIKE ROMO

DRIVER OR OPERATOR

APPROVED BY

LEASE WORK
CONTRACT PUMPING

TANK TRUCK
SERVICE

GRESSEL OIL FIELD SERVICE, L.L.C.

Post Office Box 438
Haysville, Kansas 67060
Phone: (316) 524-1225
Fax (316) 524-1027

Post Office Box 607
Phone: (620) 463-5161
Burton, Kansas 67020

Date 11-1 20 18

Company MEGA QUALITY FOCUSED
SPECIALTY CONSTRUCTION
P.O. BOX 52608 TULSA, OK 74152

Address PAWNEE CO. KANSAS No 27455

Lease ROSE ROCK 32.2 MILE POST 32 PO#10-18-0581

Description of Work

HAUL LOAD OF CUTTINGS AND MUD TO UNDERGROUND CAVERN
STABILIZATION, LLC HULTHINSON, KS.

UGS, LLC INVOICE # 1763 \$607.76

165/#245

3 1/2 hrs.

MIKE ROMP

DRIVER OR OPERATOR

APPROVED BY

784367

Date 11-1-18

Seller/Buyer Bear Petroleum

Remarks _____

Address PO Box 438

City Haysville

State KS Zip 67600-0438

76420 LB 08:24 am 11/01/18

Store _____ Sell _____

Commodity Concrete Slurry

35980 LB 09:21 am 11/01/18

Price _____

Driver: On Off

Shipper M. L. Davis

Weigher UA



Underground Cavern Stabilization, LLC
 PO Box 225
 Great Bend, KS 67530

RECEIVED

NOV 05 2018

Invoice

Date	Invoice #
11/2/2018	1763

Bill To
Gressel Oil Field Service, LLC PO Box 438 Haysville, KS 67060

Ship To
BRM #147-1175 Manifest #147-3430

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
	Net 15		11/1/2018			

Quantity	Item Code	Description	Price Each	Amount
79.61	311	Cement Slurry Manifest #147-3430	5.75	457.76T
1	360	Truck clean out - Maximum two hours Out-of-state sale, exempt from sales tax	150.00	150.00T
			0.00%	0.00

TT
6B

For questions concerning this invoice please call (620) 793-5483	Total	\$607.76
--	--------------	----------

784367

Date 11-1-18

Seller/ Buyer Grossel Oilfield

Remarks _____

Address PO Box 438

City Haysville

State KS Zip 67060-0438

78420 LB 08:24 am 11/01/18

Store _____ Sell _____

Commodity Concrete Slurry

33960 LB 09:21 am 11/01/18

Price _____

Driver: On Off

Shipper Mr. D. A. [Signature]

Weigher UA

Underground Cavern Stabilization, LLC
Post Office Box 225
GREAT BEND, KANSAS 67530-0225
Phone (620) 662-6367

No. 1691

BILL TO: Grossel Oilfield

Date: 11-1-18

Name _____

Address PO Box 438
Haysville, KS 67060-0438

Quantity:	DESCRIPTION OF SERVICE	AMOUNT	TOTAL
1	Truck cleanout	150 ⁰⁰	150 ⁰⁰

TRUCKING-COMPANY

By: [Signature]

BENEFICIAL REUSE MATERIALS MANIFEST-PROCESS KNOWLEDGE

Please print or type

1. Generator/Operator UCS ID Number: <u>147</u>	2. Page 1 of _____	3. Emergency Response Phone #:	4. Manifest Tracking Number: <u>147-3430</u>	5. UCS BRM Approval Number: <u>147 1175</u>			
6. Generator/Operator Name and Mailing Address: <u>Rose Rock Midstream L.P. 6120 State Ave #700 Tulsa, OK 74130</u>			Generator/Operator Site Address (if different than mailing address) <u>Rose Rock 32.2</u>				
7. Generator/Operator Source Location: Legal Sec. <u>2</u> Twp. <u>32</u> R. <u>16</u> East ___ West ___ ___ feet from ___ North/ ___ South line of section ___ feet from ___ East/ ___ West line of section <u>Pawnee</u> County, Kansas			Generator/Operator Source Location: Longitude & Latitude Longitude _____ Latitude _____ Generator/Operator Source Location: Physical Address:				
8. Transporter 1 Company Name <u>Gressel Oil</u>			UCS ID Number:				
9. Transporter 2 Company Name:			UCS ID Number:				
10. Designated Facility Name and Site Address: <u>Underground Cavern Stabilization, LLC</u> <u>7513 South K14 Hwy</u> <u>South Hutchinson, KS 67505</u> Facility's Phone Number: <u>620.662.6367</u>							
BRM Description (as noted on the Form 150)		11. Containers No. Type		12. Total Quantity	13. Unit Wt./Vol.		
1. <u>Concrete Slurry</u>							
2.							
3.							
14. GENERATOR/OPERATOR CERTIFICATION: Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001; 42 U.S.C. 6928 and U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.							
Generator/Operator Name <u>Michael A. Horn</u>		Signature <u>[Signature]</u>		Month	Day	Year	
15. Transporter's Acknowledgment of Receipt of Materials							
Transporter 1 Name		Signature		Month	Day	Year	Time
				<u>10</u>	<u>31</u>	<u>2018</u>	<u>5:00 PM</u>
Transporter 2 Name		Signature		Month	Day	Year	Time
16. TRANSPORTER'S CERTIFICATION: I hereby declare that the contents of this consignment have been delivered as prepared by the Generator/Operator and have not been tampered with in any way, nor have the materials been out of my custody unless otherwise noted by additional transporter signature, and that this consignment has been transported by the most direct route possible by current road conditions. I certify that the contents of this consignment conform to the terms of the attached Materials Emplacement Permit Application.							
Transporter 1 Name <u>Michael A. Horn</u>		Signature <u>[Signature]</u>		Month	Day	Year	Time
				<u>11</u>	<u>1</u>	<u>18</u>	<u>8:00 AM</u>
Transporter 2 Name		Signature		Month	Day	Year	Time
17. Discrepancy							
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Full Rejection							
18. Material Emplacement Cavern Well Location:							
19. Designated Facility Owner or Operator: Certification of receipt of beneficial reuse materials covered by the manifest except as noted in Item 17a.							
Name <u>Vicki Hester</u>		Signature <u>[Signature]</u>		Month	Day	Year	Time
				<u>11</u>	<u>1</u>	<u>18</u>	<u>8:24 AM</u>

GENERATOR/OPERATOR

TRANSPORTER

UCS FACILITY



BENEFICIAL REUSE MATERIAL INSPECTION REPORT

- 1. Date: 11-1-18
- 2. Time: 8:24am
- 3. Beneficial Reuse Material Name/Description: Cement Slurry
- 4. Transporter: Gressel Oilfield Services
- 5. Name of driver: Michael
- 6. Source of beneficial reuse material as stated by driver: Rose Rock 32.2
- 7. Hauling Permit No.: N/A
- 8. Vehicle License No.: DOT # 129702
- 9. Vehicle Type: tank
- 10. Unauthorized material found in the beneficial reuse material shipment? Yes No
- 11. If "Yes", was Rejected Beneficial Reuse Material Form completed? Yes No
- 12. Photograph identification verified? (circle) Yes No
- 13. Identification type _____ Company ID _____ Drivers License (state) _____
- 14. Inspector's observations:

Material contained in truck. Used process knowledge. Liquid (sludge) load - Had to be emplaced immediately. Not stored in Clearspan like most Lyons Salt loads.
- 15. The physical characteristics (i.e. color, odor, etc.) of the beneficial reuse material stream conform to the Material Emplacement Application and previous material shipments. Yes No
- 16. If "No," was a Rejected Beneficial Reuse Material Form completed? Yes No
- 17. BASED ON MY EXAMINATION, THE BENEFICIAL REUSE MATERIAL ACCEPTED BY BENEFICIAL REUSE MATERIAL MANIFEST NUMBER 147-3430 IS AS DESCRIBED BY THE GENERATOR IN THE GENERATOR BENEFICIAL REUSE MATERIAL PROFILE SHEET.

[Signature]
Signature of Site Inspector

11-1-18
Date

Vicki Hester
Printed Name of Inspector

8:24AM
Time

11-18

Truck

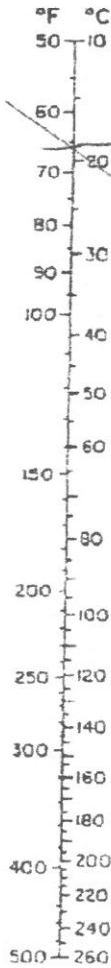
RESISTIVITY NOMOGRAPH FOR NaCl SOLUTIONS*

This nomograph is used to determine the quantity of sodium chloride (in combination with distilled water or some other salt free aqueous medium) that is necessary to produce a solution with the same resistivity as the test sample. The concentration levels for carbonate salts, calcium salts, hydroxyl salts, etc., can be found in conductance tables for aqueous solutions.

Use a straight edge to connect the values of the corresponding resistivity and temperature readings. The point where the straight edge touches the salinity scale indicates the concentration of sodium chloride. By aligning a given temperature and concentration of sodium chloride, the corresponding resistivity can also be found.

9.9
pH

1150
pH



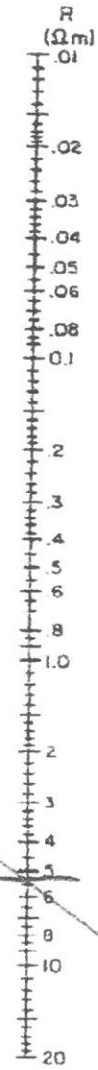
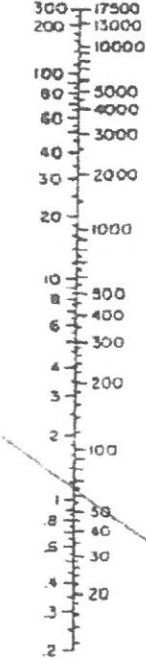
Conversion approximated by:

$$R_2 = R_1 \left(\frac{T_1 + 6.77}{T_2 + 6.77} \right)^{1.04} \text{ } ^\circ\text{F}$$

or

$$R_2 = R_1 \left(\frac{T_1 + 21.5}{T_2 + 21.5} \right)^{1.04} \text{ } ^\circ\text{C}$$

g/kg Grains/gal
or @24°C
k ppm or 75°F



65.3

526

*Reprinted by permission of Schlumberger

Norm
0.0

12.1
pH
CMA

LEASE WORK
CONTRACT PUMPING

TANK TRUCK
SERVICE

GRESSEL OIL FIELD SERVICE, L.L.C.

Post Office Box 438
Haysville, Kansas 67060
Phone: (316) 524-1225
Fax (316) 524-1027

Post Office Box 607
Phone: (620) 463-5161
Burton, Kansas 67020

Date 11-2 2018

Company PO BOX 52608 TULSA, OK 74152
MESA QUALITY FOCUSED
SPECIALTY CONSTRUCTION

Address PAWNEE Co. KANSAS No 27456

Lease ROSE ROCK 32.2 MILE POST 32 PD # 10-18-0581

Description of Work

DRIVE TO LOCATION, PICK UP LOAD OF CUTTINGS & MUD,
HAUL TO HUTCHINSON AT UGS, LLC.

#165 / #245

UGS, LLC INVOICE # 1766 \$598.90

9 1/2 hrs.

MIKE ROMO

DRIVER OR OPERATOR

APPROVED BY

784378

Date 11-2-18

Seller/Buyer Grossel Oilfield

Remarks _____

Address P.O. Box 438

City Hayville

State KY Zip 67060-0438

75360 LB 04:21 PM 11/02/18

Store _____ Sell _____

36600 LB 04:40 PM 11/02/18

Commodity Boring Cement Slurry

Price _____

Driver: On Off

Shipper Mike G. Graw

Weigher Steve Payton



Underground Cavern Stabilization, LLC
 PO Box 225
 Great Bend, KS 67530

RECEIVED

NOV 06 2018

Invoice

Date	Invoice #
11/5/2018	1766

Bill To
Gressel Oil Field Service, LLC PO Box 438 Haysville, KS 67060

Ship To
BRM #147-1175 Manifest #147-3441

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
	Net 15		11/2/2018			

Quantity	Item Code	Description	Price Each	Amount
93.22	311	Cement Slurry Manifest #147-3441	5.75	536.02T
		8.00% Reno County Sales Tax	8.00%	42.88

For questions concerning this invoice please call (620) 793-5483	Total	\$578.90
--	--------------	----------

Date	ID #	Generator Name	Transport Company	Driver	Manifest Tracking #	BM Approval #	BM Agrees with Manifest	Scale Ticket #	Volume (Tons)	Emplacement Location	NORM Residue (pounds)	Volume (Tons)	WEIRN in (lb)	WEIRN Out (lb)	Volume (bb)	Volume (bbl)	Unit Density PPG	Chlorides PPM	pH	5mm Durp.	Semi Tank	VENUE Type
11/2/2018	147	Gressel Oil	Gressel Oil	Michael	147-3441	147-1175	YES	784378	19.34	SW-13	0	19.18	75380	36600	93.22	38750	9.9	1,500	9.1			X

784378

Date 11-2-18

Seller/Buyer Grossed outfield

Remarks _____

Address P.O. Box 438

City Hoytville

State KS Zip 67060-0438

75360 LB 04:21 PM 11/02/18

Store _____ Sell _____

36500 LB 04:40 PM 11/02/18

Commodity Born's Cornstarch

Price _____

Driver: On Off

Shipper Mike G. Givens

Weigher Steve Paulsen

BENEFICIAL REUSE MATERIALS MANIFEST-PROCESS KNOWLEDGE

Please print or type

GENERATOR/OPERATOR	1. Generator/Operator UCS ID Number: 147	2. Page 1 of _____	3. Emergency Response Phone #:	4. Manifest Tracking Number: 147-3441	5. UCS BRM Approval Number: 147-1175		
	6. Generator/Operator Name and Mailing Address: Rose Rock Midstream LP 1520 S Yale Ave #700 Tulsa, OK 74136			Generator/Operator Site Address (if different than mailing address) 32.8 Rose Rock 32.8			
	7. Generator/Operator Source Location: Legal Sec 36 Twp 33E R. 10 East West 10 _____ feet from _____ North/ _____ South line of section _____ feet from _____ East/ _____ West line of section Pawnee County, Kansas			Generator/Operator Source Location: Longitude & Latitude Longitude _____ Latitude _____ Generator/Operator Source Location: Physical Address:			
	8. Transporter 1 Company Name Gresel Oil			UCS ID Number:			
	9. Transporter 2 Company Name			UCS ID Number:			
	10. Designated Facility Name and Site Address: Underground Cavern Stabilization, LLC 7513 South K14 Hwy South Hutchinson, KS 67505			Facility's Phone Number: 620.662.6367			
	BRM Description (as noted on the Form 150)		11. Containers	12. Total Quantity	13. Unit Wt./Vol.		
			No.	Type			
	1. Cement Slurry						
	2.						
3.							
14. GENERATOR/OPERATOR CERTIFICATION: Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001; 42 U.S.C. 6928 and U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.							
Generator/Operator Name Michael Axano		Signature <i>[Signature]</i>		Month	Day	Year	
15. Transporter's Acknowledgment of Receipt of Materials							
Transporter 1 Name Michael Axano		Signature <i>[Signature]</i>		Month	Day	Year	Time
				11	2	18	3:00 PM
Transporter 2 Name		Signature		Month	Day	Year	Time
16. TRANSPORTER'S CERTIFICATION: I hereby declare that the contents of this consignment have been delivered as prepared by the Generator/Operator and have not been tampered with in any way, nor have the materials been out of my custody unless otherwise noted by additional transporter signature, and that this consignment has been transported by the most direct route possible by current road conditions. I certify that the contents of this consignment conform to the terms of the attached Materials Emplacement Permit Application.							
Transporter 1 Name Michael Axano		Signature <i>[Signature]</i>		Month	Day	Year	Time
				11	2	18	4:21 AM
Transporter 2 Name		Signature		Month	Day	Year	Time
17. Discrepancy							
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Full Rejection							
18. Material Emplacement Cavern Well Location:							
19. Designated Facility Owner or Operator: Certification of receipt of beneficial reuse materials covered by the manifest except as noted in Item 17a.							
Name St. P. O.		Signature <i>[Signature]</i>		Month	Day	Year	Time
				11	2	18	4:21 AM



BENEFICIAL REUSE MATERIAL INSPECTION REPORT

1. Date: 11-2-18
2. Time: 4:21 PM
3. Beneficial Reuse Material Name/Description: Cement Slurry
4. Transporter: Gressel Oilfield Services
5. Name of driver: M. Ke
6. Source of beneficial reuse material as stated by driver: Rose Rock ~~32.8~~ 32.8
7. Hauling Permit No.: N/A
8. Vehicle License No.: Ba DOT # 129702
9. Vehicle Type: Semi Tanker
10. Unauthorized material found in the beneficial reuse material shipment? Yes No
11. If "Yes", was Rejected Beneficial Reuse Material Form completed? Yes No
12. Photograph identification verified? (circle) Yes No
13. Identification type _____ Company ID _____ Drivers License (state) _____
14. Inspector's observations:

Material contained in truck. Used process knowledge. Liquid (sludge) load - Had to be emplaced immediately. Not stored in Clearspan like most Lyons Salt loads.
15. The physical characteristics (i.e. color, odor, etc.) of the beneficial reuse material stream conform to the Material Emplacement Application and previous material shipments. Yes No
16. If "No," was a Rejected Beneficial Reuse Material Form completed? Yes No
17. BASED ON MY EXAMINATION, THE BENEFICIAL REUSE MATERIAL ACCEPTED BY BENEFICIAL REUSE MATERIAL MANIFEST NUMBER 147-3441 IS AS DESCRIBED BY THE GENERATOR IN THE GENERATOR BENEFICIAL REUSE MATERIAL PROFILE SHEET.

Steve Pambour
Signature of Site Inspector

11-2-18
Date

Steve Pambour
Printed Name of Inspector

4:21 PM
Time

14-18

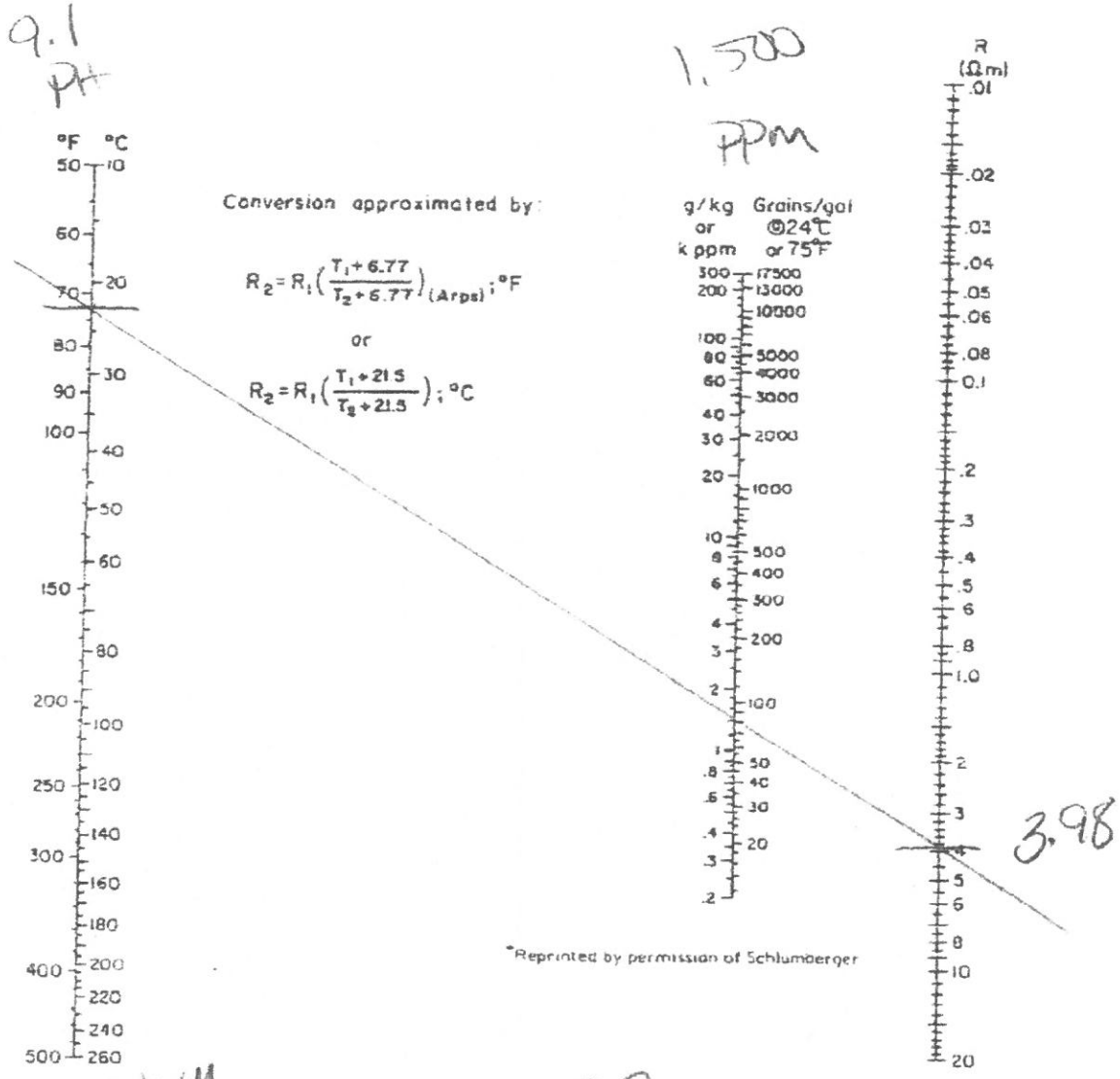
Giesel

Track

RESISTIVITY NOMOGRAPH FOR NaCl SOLUTIONS*

This nomograph is used to determine the quantity of sodium chloride (in combination with distilled water or some other salt free aqueous medium) that is necessary to produce a solution with the same resistivity as the test sample. The concentration levels for carbonate salts, calcium salts, hydroxyl salts, etc., can be found in conductance tables for aqueous solutions.

Use a straight edge to connect the values of the corresponding resistivity and temperature readings. The point where the straight edge touches the salinity scale indicates the concentration of sodium chloride. By aligning a given temperature and concentration of sodium chloride, the corresponding resistivity can also be found.



*Reprinted by permission of Schlumberger

Normal
9.0

9.9
PPA
UA

LEASE WORK
CONTRACT PUMPING

TANK TRUCK
SERVICE

GRESSEL OIL FIELD SERVICE, L.L.C.

Post Office Box 438
Haysville, Kansas 67060
Phone: (316) 524-1225
Fax (316) 524-1027

Post Office Box 607
Burton, Kansas 67020
Phone: (620) 463-5161

MESA QUALITY FOCUSED
SPECIALTY CONSTRUCTION

Date 11-3 2018

Company TULSA, OK 74152

Address PAWNEE CO. KANSAS No 27457

Lease ROSE ROCK 32.2 MILE POST 32 PO # 10-18-0581

Description of Work

DRIVE TO LOCATION PICKUP LOAD OF OUTTINGS AND MUD,
BRING BACK TO GTSBEND

165/#245

5 hrs.

MIKE RANO

DRIVER OR OPERATOR

APPROVED BY

LEASE WORK
CONTRACT PUMPING

TANK TRUCK
SERVICE

GRESSEL OIL FIELD SERVICE, L.L.C.

Post Office Box 438
Haysville, Kansas 67060
Phone: (316) 524-1225
Fax (316) 524-1027

Post Office Box 607
Burton, Kansas 67020
Phone: (620) 463-5161

Date 11-6-18

Company MESA QUALITY FOCUSED
SPECIALTY CONSTRUCTION
PO BOX 52608
TULSA, OK 74152

Address PAWNEE Co. KANSAS No 27458

Lease ROSE ROCK 32.2 MILE POST 32 PO # 10-18-0581

Description of Work

TAKE LOAD OF DUTTINGS AND MUD TO UGS, LLC AT
HUTCHINSON.

UGS, LLC INVOICE # 1768 \$305.67

#1205 / #1145

3 1/2 hrs

MIKE ROMO

DRIVER OR OPERATOR

APPROVED BY

784381

Date 11-6-18

Seller/Buyer Givens Oilfield

Remarks _____

Address PO Box 438

City Hopewell

63820 LB 09:56 am 11/06/18

State KS Zip 67060-0438

Store _____ Sell _____

Commodity Canum Shumy

36360 LB 10:32 am 11/06/18

Price _____

Driver: On _____ Off _____

Shipper Michael L. Lorne

Weigher TLH



Underground Cavern Stabilization, LLC

PO Box 225
Great Bend, KS 67530

Invoice

Date	Invoice #
11/7/2018	1768

Bill To
Gressel Oil Field Service, LLC PO Box 438 Haysville, KS 67060

Ship To
BRM #147-1175 Manifest #147-3444

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
	Net 15		11/6/2018			

Quantity	Item Code	Description	Price Each	Amount
53.16	311	Cement Slurry Manifest #147-3444	5.75	305.67T
		Tax Exempt Sales Tax	0.00%	0.00

For questions concerning this invoice please call (620) 793-5483	Total	\$305.67
--	--------------	----------

784381

Date 11-6-18

RHO1

SALINA SCALE SALES & SERVICE - SALINA, KS

Seller/Buyer Givens Oilfield

Address PO Box 438

City Haysville

State KS zip 67060-0438

Store _____ Sell _____

Commodity Cement Shims

Price _____

Driver: On Off

Shipper Michael J. Jones

Weigher JD

Remarks _____

63820 LB 09:56 am 11/06/18

78360 LB 10:32 am 11/06/18

BENEFICIAL REUSE MATERIALS MANIFEST-PROCESS KNOWLEDGE

Please print or type

GENERATOR/OPERATOR	1. Generator/Operator UCS ID Number: <u>147</u>	2. Page 1 of _____	3. Emergency Response Phone #:	4. Manifest Tracking Number: <u>147-3444</u>	5. UCS BRM Approval Number: <u>147-1175</u>			
	6. Generator/Operator Name and Mailing Address: <u>Rose Rock Midstream LP</u> <u>1620 State Ave #700</u> <u>Tulsa, OK 74136</u>			Generator/Operator Site Address (if different than mailing address) <u>32.8</u> <u>Rose Rock 322</u>				
	7. Generator/Operator Source Location: Legal Sec <u>6</u> Twp. <u>32</u> R. <u>10</u> East West <u>0</u> feet from _____ North/ _____ South line of section feet from _____ East/ _____ West line of section <u>Dawson</u> County, Kansas			Generator/Operator Source Location: Longitude & Latitude Longitude _____ Latitude _____ Generator/Operator Source Location: Physical Address:				
	8. Transporter 1 Company Name <u>Gressel Oil</u>			UCS ID Number:				
	9. Transporter 2 Company Name			UCS ID Number:				
	10. Designated Facility Name and Site Address: <u>Underground Cavern Stabilization, LLC</u> <u>7513 South K14 Hwy</u> <u>South Hutchinson, KS 67505</u> Facility's Phone Number: <u>620.662.6367</u>							
	BRM Description (as noted on the Form 150)				11. Containers	12. Total Quantity	13. Unit Wt./Vol.	
					No.	Type		
	1. <u>Concrete Slurry</u>							
	2.							
3.								
14. GENERATOR/OPERATOR CERTIFICATION: Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001; 42 U.S.C. 6928 and U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.								
Generator/Operator Name <u>Michael Henry</u>		Signature <u>[Signature]</u>		Month	Day	Year		
15. Transporter's Acknowledgment of Receipt of Materials								
Transporter 1 Name <u>Michael Henry</u>		Signature <u>[Signature]</u>		Month <u>11</u>	Day <u>3</u>	Year <u>2016</u>	Time <u>1:00 PM</u>	
Transporter 2 Name		Signature		Month	Day	Year	Time	
16. TRANSPORTER'S CERTIFICATION: I hereby declare that the contents of this consignment have been delivered as prepared by the Generator/Operator and have not been tampered with in any way, nor have the materials been out of my custody unless otherwise noted by additional transporter signature, and that this consignment has been transported by the most direct route possible by current road conditions. I certify that the contents of this consignment conform to the terms of the attached Materials Emplacement Permit Application.								
Transporter 1 Name <u>Michael Henry</u>		Signature <u>[Signature]</u>		Month <u>11</u>	Day <u>6</u>	Year <u>2016</u>	Time <u>1:50 PM</u>	
Transporter 2 Name		Signature		Month	Day	Year	Time	
17. Discrepancy								
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Full Rejection								
18. Material Emplacement Cavern Well Location:								
19. Designated Facility Owner or Operator: Certification of receipt of beneficial reuse materials covered by the manifest except as noted in Item 17a.								
Name <u>Vicky Hester</u>		Signature <u>[Signature]</u>		Month <u>11</u>	Day <u>6</u>	Year <u>18</u>	Time <u>9:50 AM</u>	



BENEFICIAL REUSE MATERIAL INSPECTION REPORT

1. Date: 11-6-18
 2. Time: 9:56am
 3. Beneficial Reuse Material Name/Description: Cement Slurry
 4. Transporter: Gressel Oilfield Services
 5. Name of driver: Michael
 6. Source of beneficial reuse material as stated by driver: Rose Rock 32.2
 7. Hauling Permit No.: N/A
 8. Vehicle License No.: Ba DOT # 129702
 9. Vehicle Type: Truck

10. Unauthorized material found in the beneficial reuse material shipment? Yes No
 11. If "Yes", was Rejected Beneficial Reuse Material Form completed? Yes No
 12. Photograph identification verified? (circle) Yes No
 13. Identification type Company ID Drivers License (state) _____

14. Inspector's observations: Material contained in truck. Used process knowledge. Liquid (sludge) load - Had to be emplaced immediately. Not stored in Clearspan like most Lyons Salt loads.

15. The physical characteristics (i.e. color, odor, etc.) of the beneficial reuse material stream conform to the Material Emplacement Application and previous material shipments. Yes No

16. If "No," was a Rejected Beneficial Reuse Material Form completed? Yes No

17. BASED ON MY EXAMINATION, THE BENEFICIAL REUSE MATERIAL ACCEPTED BY BENEFICIAL REUSE MATERIAL MANIFEST NUMBER 14-7-314 IS AS DESCRIBED BY THE GENERATOR IN THE GENERATOR BENEFICIAL REUSE MATERIAL PROFILE SHEET.

CH
 Signature of Site Inspector
Vicky Hester
 Printed Name of Inspector

11-6-18
 Date
9:56am
 Time

11-6-18

Gravel

TRUCK

RESISTIVITY NOMOGRAPH FOR NaCl SOLUTIONS*

This nomograph is used to determine the quantity of sodium chloride (in combination with distilled water or some other salt free aqueous medium) that is necessary to produce a solution with the same resistivity as the test sample. The concentration levels for carbonate salts, calcium salts, hydroxyl salts, etc., can be found in conductance tables for aqueous solutions.

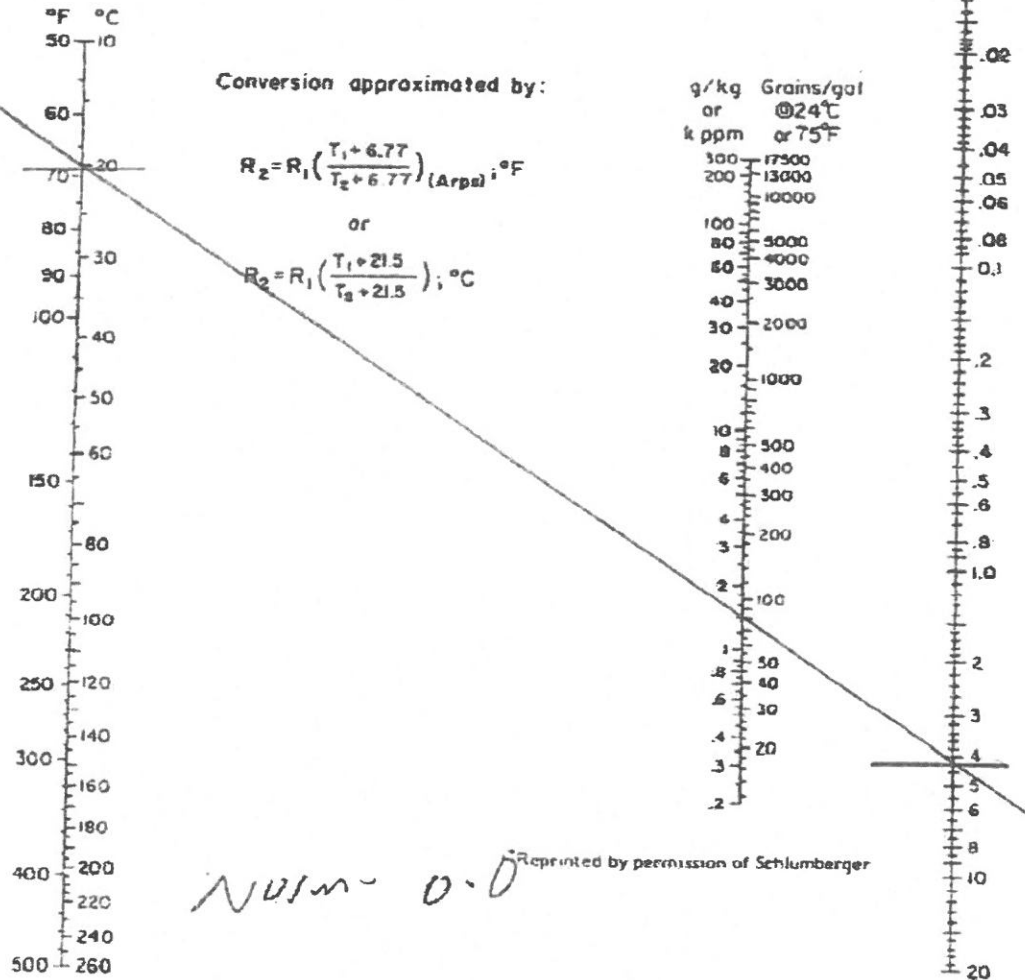
Use a straight edge to connect the values of the corresponding resistivity and temperature readings. The point where the straight edge touches the salinity scale indicates the concentration of sodium chloride. By aligning a given temperature and concentration of sodium chloride, the corresponding resistivity can also be found.

pH - 9.9

1500 ppm

68.9

4.12



NUM - 0.0

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12.3 ppm
Alan B...