DATE IN 1/23/2018	SUSPENSE	ENGINEER	LOGGED IN 1/24/2018	TYPE SWD	APP NO. pMAM1802955055

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

RECEIVED OCD
2018 JAN 23 P 2:47

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

-SWD
-Percussion Petroleum Operating, LLC
371755
well
B&B #4
30-015-28432
Pool
-SWD; Cisco-Canyon
96184

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ben Stone		Agent Percussion Petroleum Oper'tng, LLC	1/19/2018
Print or Type Name	Signature	Title	Date

ben@sosconsulting.us
e-mail Address

January 19, 2018

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Attn: Acting Director

Re: Application of Percussion Petroleum, LLC to permit for salt water disposal its B&B Well No.4, located in Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico.

Dear Sir or Madam,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to permit for disposal, the B&B No.4. Percussion selected this well for private disposal of produced water coming from their operations in the area. We would point out that while the Cisco formation has in the past been productive in the area, all existing wells have been recompleted uphole into the Glorieta and Yeso formations. Percussion and EOG Resources are the primary operators in the area; the proposed interval was selected based on conversations with EOG geology and engineering staff.

Percussion Petroleum seeks to optimize efficiency, both economically and operationally, of its operations in southeast New Mexico. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice will run on January 20, 2018 in the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit will be forwarded when received. This application also includes a wellbore schematic, area of review maps, leaseholder plats and other required information for a complete Form C-108. The well is located on private land and minerals. There are no state or BLM lands/ minerals within the ½ mile radius notice area.

I respectfully request that the approval of this salt water disposal well proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

Ben Stone, Partner
SOS Consulting, LLC
Agent for Percussion Petroleum, LLC

Cc: Application attachment and file

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ***Salt Water Disposal*** and the application ***QUALIFIES*** for administrative approval.

II. OPERATOR: ***Percussion Petroleum Operating, LLC***
ADDRESS: ***919 Milam, Ste.2475, Houston, TX 77002***

CONTACT PARTY: ***Agent: SOS Consulting, LLC – Ben Stone (903) 488-9850***

III. WELL DATA: ***All well data and applicable wellbore diagrams are ATTACHED.***

IV. ***This is not an expansion of an existing project.***

V. ***A map is attached*** that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

*VI. A tabulation is attached of data on all wells of public record within the area of review which penetrate the proposed injection zone. ***There are 8 Wells (2 P&A) in the subject AOR which penetrate the target interval.*** The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of any plugged well illustrating all plugging detail.

VII. ***The following data is ATTACHED*** on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. ***Appropriate geologic data on the CISCO and CANYON formations is ATTACHED*** including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. ***Stimulation program – a conventional acid job may be performed to clean and open the formation.***

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). ***Existing well logs are on file with OCD.***

*XI. ***There are 3 domestic water wells within one mile of the proposed salt water disposal well. Analyses will be forwarded.***

XII. ***An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found*** of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. ***"Proof of Notice" section on the next page of this form has been completed and ATTACHED. There are 2 offset lessees and/or operators within ½ mile; Well location and minerals are PRIVATE.***

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: ***Ben Stone*** TITLE: ***SOS Consulting, LLC agent for Percussion Petroleum Operating, LLC***

SIGNATURE: _____ DATE: ***1/19/2018***

E-MAIL ADDRESS: ***ben@sosconsulting.us***

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

FORM C-108 – APPLICATION FOR AUTHORIZATION TO INJECT (cont.)

III. WELL DATA – ***The following information and data is included (See ATTACHED Wellbore Schematic):***

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No., Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE ***pursuant to the following criteria is ATTACHED.***

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

C-108 - Items III, IV, V

Item III - Subject Well Data

1. Wellbore Schematic – CURRENT

2. Wellbore Schematic – PROPOSED

Item IV – Tabulation of AOR Wells

Tabulation includes all construction data for all wells within a one-half mile Radius of the subject well and which penetrate the proposed interval.

Item V – Area of Review Maps

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius

2. One-Half Mile AOR Map

All Above Exhibits follow this page.

CURRENT WELLBORE DIAGRAM

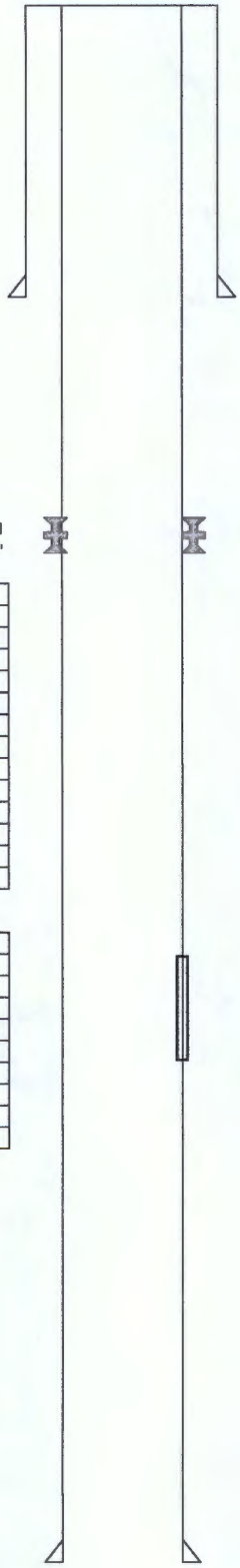
API #	30-015-28430	**B&B 22 #4**	County, ST	Eddy County, NM
Operator	Percussion Petroleum		Sec-Twn-Rng	22-19S-25E
Field	Dagger Draw; Upper Penn, North		Footage	660' FNL and 1980' FEL
Spud Date	1/3/1997		Survey	

Formation (MD)	
Glorieta	2351'
3rd Bone Spring	5561'
Wolfcamp	5891'
Top Cisco/Canyon	7646'
Base Cisco/Canyon	8006'

RKB	3486'
GL	3471'

Hole Size	14-3/4"
TOC	surf
Method	circ returns

Csg Depth	1120'
Size	9-5/8"
Weight	36ppf
Grade	J55
Connections	STC
Cement	1100sx



DV Tool at 6028'

Well History

1/21/1997 Ran DSTs in Cisco Canyon.
3/10/1997 Pickle inside/outside of tbg w/ 7bbls xylene + 19bbls 15%HCL. Perf Cisco/Canyon from 7659'-7676', 7685'-7730', 7738'-48', 7777'-90'.
3/11/1997 Break down perfs w/ PPI tools at 8' intervals w/ 4bbls 15%NEFE acid per setting. Set pkr at 7769'. Acidize 7777'-90' w/ 24bbls 15%NEFE acid w/ 100 1.3SG ball sealers, good ball action, ATP 2kpsi at 5bpm. ISIP 4600psi (ISIP is higher than ATP??).
3/12/1997 FRAC?
Run ESP on 2-7/8" tbg.
12/15/1997 Pumped 80bopd+900bwpd, 450mcfpd.
3/28/2002 Pull ESP, run rods/tbg.
Pump 40bopd+300bwpd+140mcfpd.
2/15/2011 Pump 5bbls Xylene +48bbls 15%NEFE +307bbls FW at 2.5bpm 0psi.
11/21/2011 Last report.

Tubing Detail				
Jts	Size	Depth	Length	Detail

Rod Detail					
Rods	Size	Depth	Length	Guides	Detail

Perforations

7659'-7676' (Cisco/Canyon): 3/10/1997 w/ 4" gun 2 jspf (CNL/LDT)
7695'-7705' (Cisco/Canyon): 3/11/1997 w/ 4" gun 2 jspf (CNL/LDT)
7685'-7730' (Cisco/Canyon): 3/10/1997 w/ 4" gun 2 jspf (CNL/LDT)
7738'-7748' (Cisco/Canyon): 3/10/1997 w/ 4" gun 2 jspf (CNL/LDT)
7777'-7790' (Cisco/Canyon): 3/10/1997 w/ 4" gun 2 jspf (CNL/LDT)

Hole Size	8-3/4"
TOC	surf
Method	circ returns

Csg Depth	8200'
Size	7"
Weight	23/26ppf
Grade	N80/K55
Connections	STC/LTC/BTC
Cement	1250sx

PBTD	8115'
TD MD	8206'
TD TVD	8206'

Last Update	2/9/2017
By	MM

PERCUSSION PETROLEUM LLC

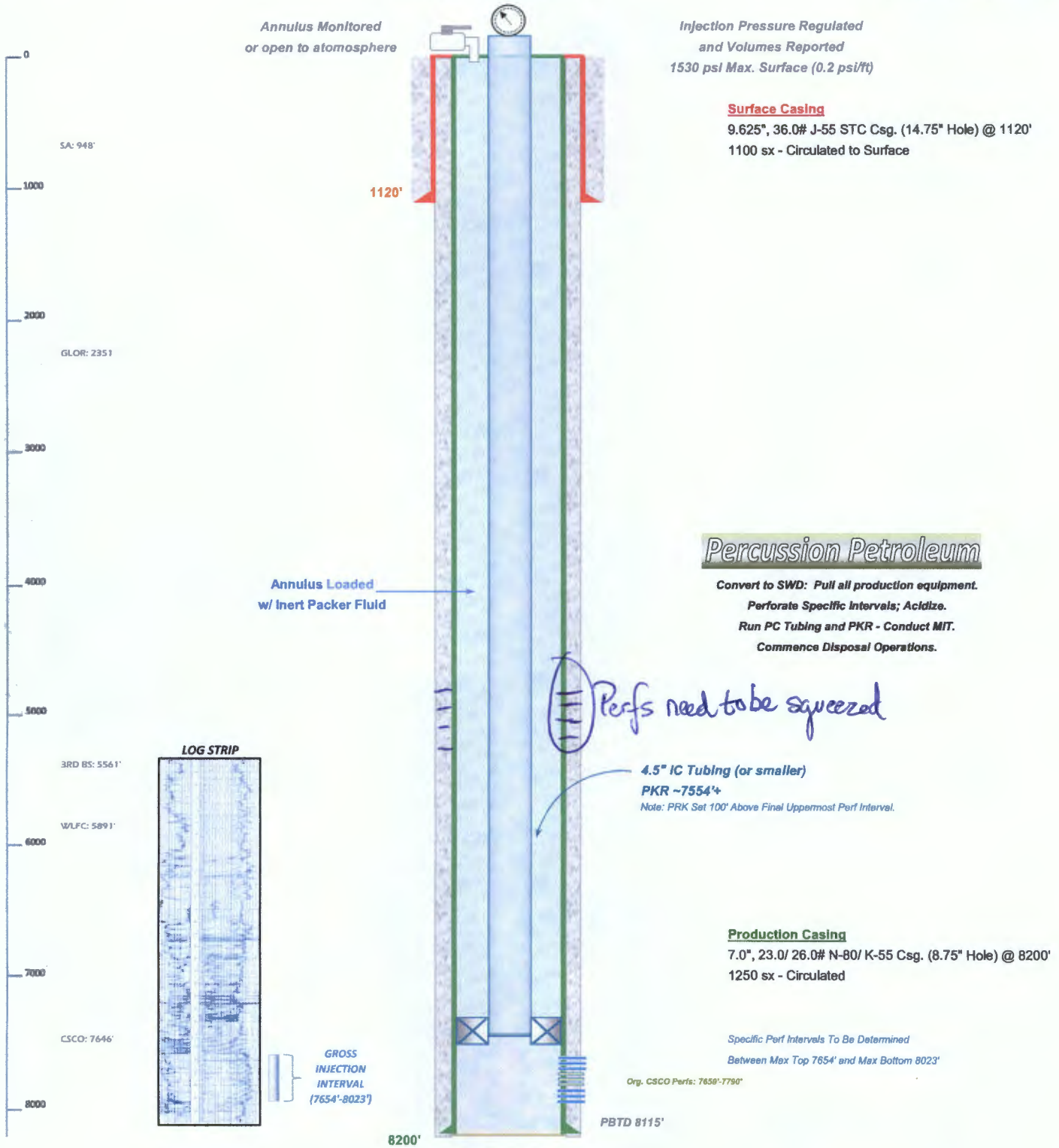
WELL SCHEMATIC - PROPOSED
B&B Well No.4 SWD

SWD; Cisco-Canyon (96186)

API 30-015-28430

660' FNL & 1980' FEL, SEC. 22-T19S-R25E
EDDY COUNTY, NEW MEXICO

Spud Date: 1/03/1997
Config SWD Dt (Est): ~3/15/2



Surface Casing
9.625", 36.0# J-55 STC Csg. (14.75" Hole) @ 1120'
1100 sx - Circulated to Surface

Percussion Petroleum

Convert to SWD: Pull all production equipment.
Perforate Specific Intervals; Acidize.
Run PC Tubing and PKR - Conduct MIT.
Commence Disposal Operations.

Production Casing
7.0", 23.0/ 26.0# N-80/ K-55 Csg. (8.75" Hole) @ 8200'
1250 sx - Circulated

Specific Perf Intervals To Be Determined
Between Max Top 7654' and Max Bottom 8023'

Drawn by: Ben Stone, 1/19/2018

SOS Consulting, LLC

Form C-108 Item VI - Tabulation of AOR Wells

	Top of Proposed CISCO Interval 7654'			8 Wells Penetrate Proposed Interval.						
API	Current Operator	Well Name	Well No.	Type	Lease	Status	ULSTR	Depth	Plug Dt.	
Subject Well										
30-015-28430	[371755] PERCUSSION PETRO. OPER'TNG, LLC	B & B	#004	Oil	Private	Active	B-22-19S-25E	8200'		
Section 22 wells										
30-015-43810	[25575] EOG Y RESOURCES, INC.	APOLLO APU FEDERAL COM	#006H	Oil	Federal	New	B-22-19S-25E	2570' TVD		
30-015-28375	[371755] PERCUSSION PETRO. OPER'TNG, LLC	ROSS RANCH 22	#003	Oil	Private	Active	C-22-19S-25E	*8070'		
		GLOR/YESO Perfs: 2295'-2779'; *PBTD 3771' ; 9.625" (14.75" hole) @ 1117' w/ 950 sx - Circ.; 7.0" (8.75" hole) @ 8070' w/ 850 sx - Circ.								
30-015-44382	[371755] PERCUSSION PETRO. OPER'TNG, LLC	GOODMAN 22	#001H	Oil	Private	New	C-22-19S-25E	2850' TVD		
30-015-44383	[371755] PERCUSSION PETRO. OPER'TNG, LLC	GOODMAN 22	#002H	Oil	Private	New	C-22-19S-25E	2880' TVD		
30-015-28380	[371755] PERCUSSION PETRO. OPER'TNG, LLC	ROSS RANCH 22	#004	Gas	Private	Active	F-22-19S-25E	*8190'		
		GLOR/YESO Perfs: 2320'-3038'; *PBTD 3782' ; 9.625" (14.75" hole) @ 1112' w/ 1100 sx - Circ. 111 sx; 7.0" (8.75" hole) @ 8190' w/ 1200 sx - Circ.								
30-015-22466	[371755] PERCUSSION PETRO. OPER'TNG, LLC	B & B	#001	Oil	Private	Active	G-22-19S-25E	*9484'		
		GLOR/YESO Perfs: 2519'-3780'; *PBTD 3876' ; 13.375" (17.5" hole) @ 327' w/ 325 sx - Circ.; 8.625" (12.25" hole) @ 1200' w/ 750 sx - Circ.; 4.5" (7.875" hole) @ 9484' w/ 1025 sx - Circ.; RAN 5.5" @ 3985' w/ 800 sx.								
30-01S-44161	[371755] PERCUSSION PETRO. OPER'TNG, LLC	B&B 22	#012	Oil	Private	Active	G-22-19S-25E	3993'		
		GLOR/YESO Perfs: 2996'-3106'; 8.625" (11.0" hole) @ 825' w/ 751 sx - Circ.; 5.5" (7.875" hole) @ 3993' w/ 620 sx - Circ.								
30-015-28431	[371755] PERCUSSION PETRO. OPER'TNG, LLC	B & B	#007	Oil	Private	Active	H-22-19S-25E	*8164'		
		GLOR/YESO Perfs: 2347'-2787'; *PBTD 3926' ; 9.625" (14.75" hole) @ 1300' w/ 775 sx - Circ.; 7.0" (8.75" hole) @ 8100' w/ 950 sx - Circ.								
30-015-28432	[371755] PERCUSSION PETRO. OPER'TNG, LLC	B & B	#009	Oil	Private	Active	J-22-19S-25E	*8280'		
		GLOR/YESO Perfs: 2308'-2752'; *PBTD 3972' ; 9.625" (14.75" hole) @ 1138' w/ 1200 sx - Circ.; 7.0" (8.75" hole) @ 8280' w/ 1350 sx - Circ.								
30-015-44366	[371755] PERCUSSION PETRO. OPER'TNG, LLC	GOODMAN 22	#004H	Oil	Private	New	K-22-19S-25E	0'		
		NEW - NOT DRILLED - WILL NOT PENETRATE.								
Section 15 wells										
30-015-00150	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil		P&A	J-15-19S-25E	0'	1/1/1901	
		NO WELL FILE ON RECORD; NO DATA								
30-015-28558	[25575] EOG Y RESOURCES, INC.	BOYD BN	#002	Oil	Private	P&A	J-15-19S-25E	8350'	11/20/2006	
		SEE P&A WELL DIAGRAM.								
30-015-28628	[371755] PERCUSSION PETRO. OPER'TNG, LLC	OSAGE BOYD 15	#004	Oil	Private	Active	N-15-19S-25E	*8150'		
		GLOR/YESO Perfs: 2371'-3074'; *PBTD 3465' ; 9.625" (14.75" hole) @ 1127' w/ 1150 sx - Circ.; 7.0" (8.75" hole) @ 8150' w/ 1125 sx - Circ.								
30-015-29501	[25575] EOG Y RESOURCES, INC.	BOYD BN	#006	Oil	Private	P&A	O-15-19S-25E	8218'	11/13/2006	
		SEE P&A WELL DIAGRAM.								

SUMMARY: 8 wells in 1/2 mile radius penetrate proposed disposal interval. 2 P&As.

SOS Consulting, LLC

C-108 ITEM VI – AOR WELL INFORMATION

Plugged Well Schematics

WELL NAME: Boyd BN #2 **FIELD**:

LOCATION: 1,980' FSL & 1,980' FEL of Section 15-19S-25E Eddy Co., NM

GL: 3,456' **ZERO**: **KB**: 3,471'

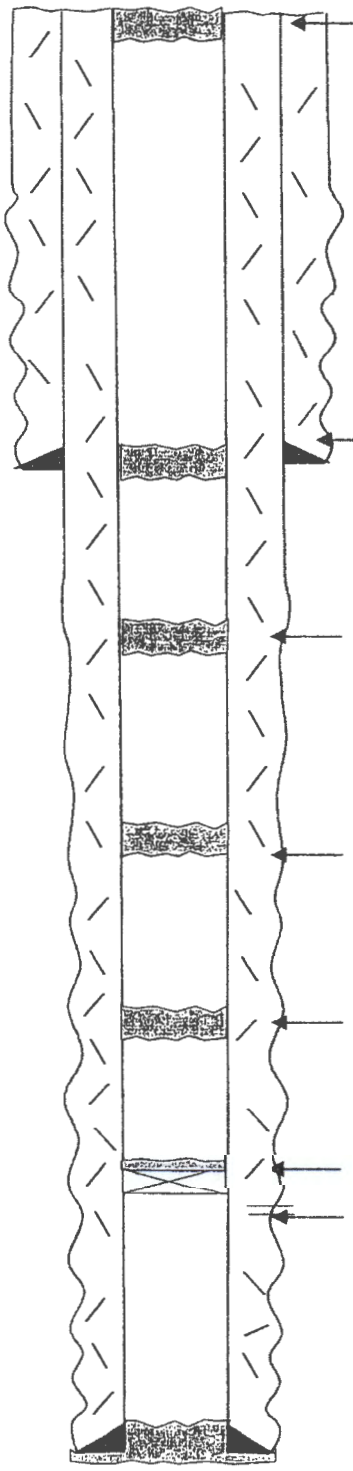
SPUD DATE: 9/1/95 **COMPLETION DATE**: 9/26/95

COMMENTS: API No.: 30-015-28558

CASING PROGRAM

9-5/8" 36# J55 STC		1,165'
7" 26# N80	366'	
7" 26# J55	906'	
7" 23# J55	3,722'	
7" 26# J55	2,623'	
7" 26# J55	733'	8,350'

After



Cement Plug 0-150' w/ 25 sx cmt

14-3/4" Hole

Cement Plug 1,065-1,215 w/ 25 sx cmt

9-5/8" @ 1,165' w/1,150 sx cmt

Cement Plug 2,222-2,372' w/25 sx cmt

8-3/4" Hole

Cement Plug 3,863-4,013' w/25 sx cmt

Cement Plug 5,504-5,654' w/25 sx cmt

CIBP @ 7,686' capped w/35' cmt

Canyon Perfs: 7,726-7,820' (35)

FC: 8,305'
TD: 8,350'

7" @ 8,350' w/ 1,300 sx (Circ)

TOPS:

SA	767'
Glorieta	2,372'
BS	3,931'
Wolfcamp	5,654'
U. Penn	7,610'

Not to Scale
3/28/00
DC/Hill

WELL NAME: Boyd BN #6 **FIELD**: Dagger Draw

LOCATION: 660' FSL & 1,780' FEL of Section 15-19S-25E Eddy Co., NM

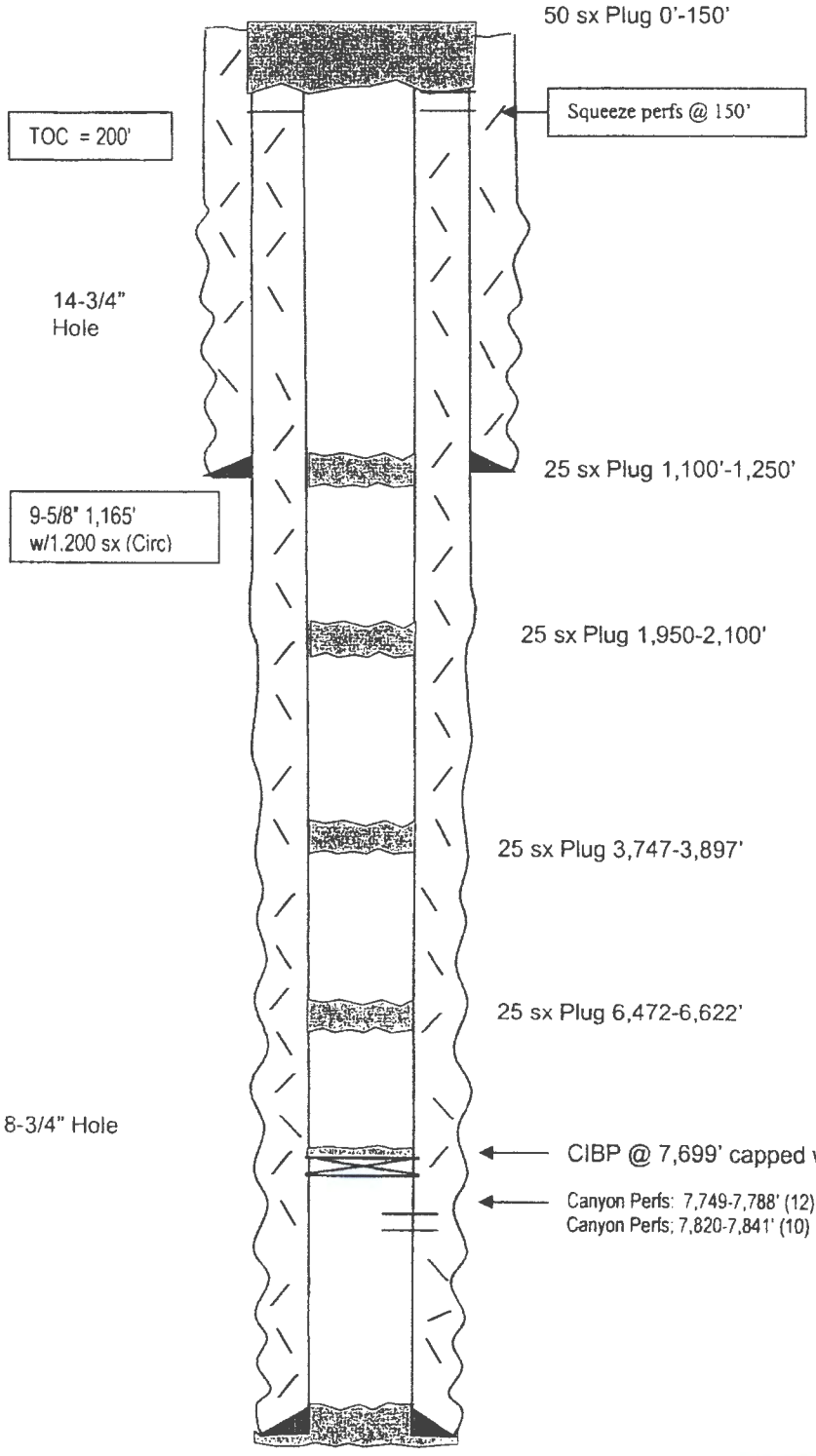
GL: 3,469' **ZERO**: **KB**: 3,483'

SPUD DATE: 12/29/97 **COMPLETION DATE**: 1/27/98

COMMENTS: API No.: 30-015-29501

CASING PROGRAM

9-5/8" 36# J55 STC		1,165'
7" 26# J55	576'	
7" 23# J55	4,889'	
7" 26# J55	1,998'	
7" 26# J55 SB	82'	
7" 26# N80 SB	686'	8,218'



After

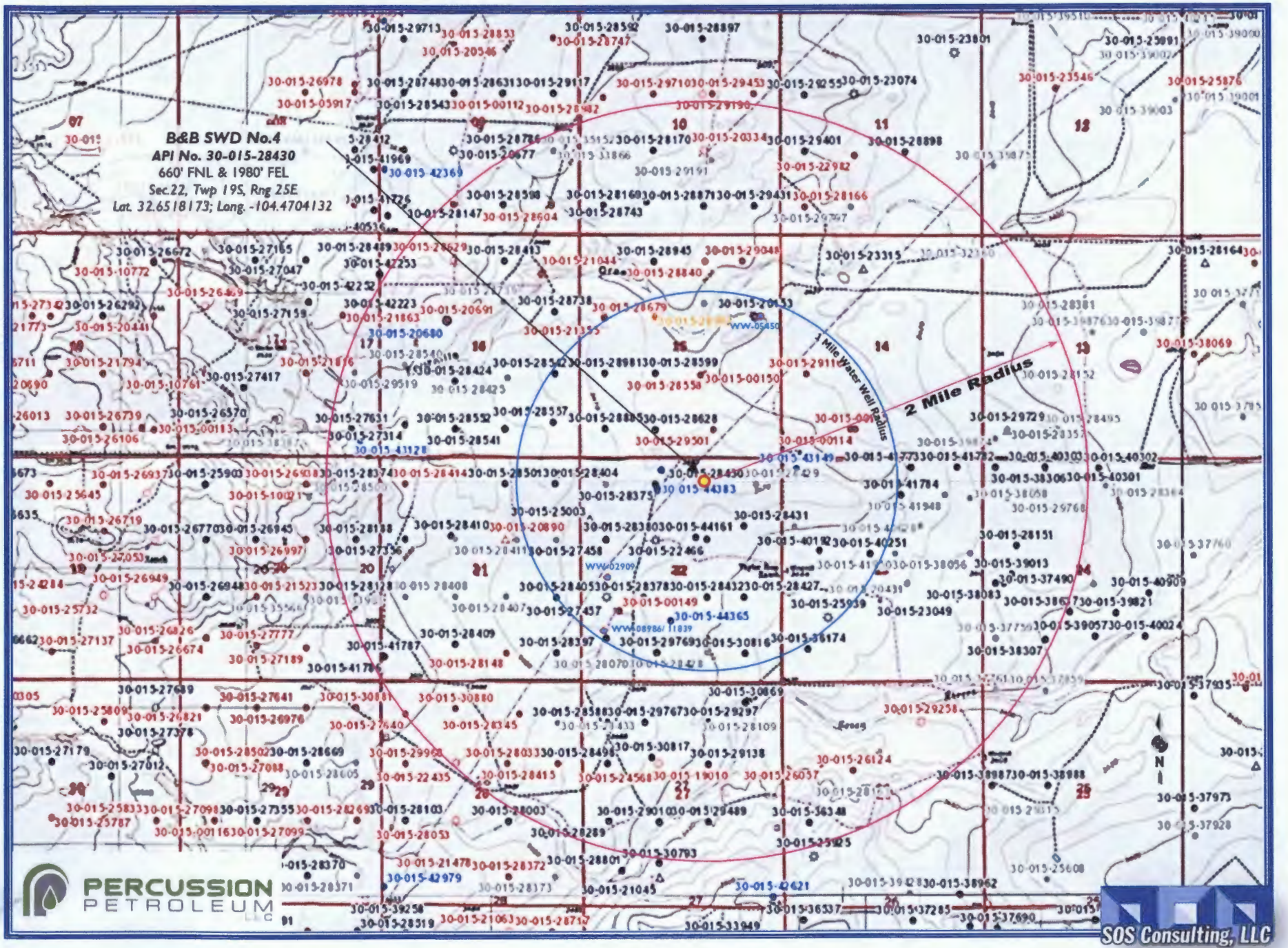
TOPS

SA	772'
Glorieta	2,100'
BS	3,897'
Wolfcamp	6,622'
Canyon	7,654'

Not to Scale
3/28/06
DC/Hill

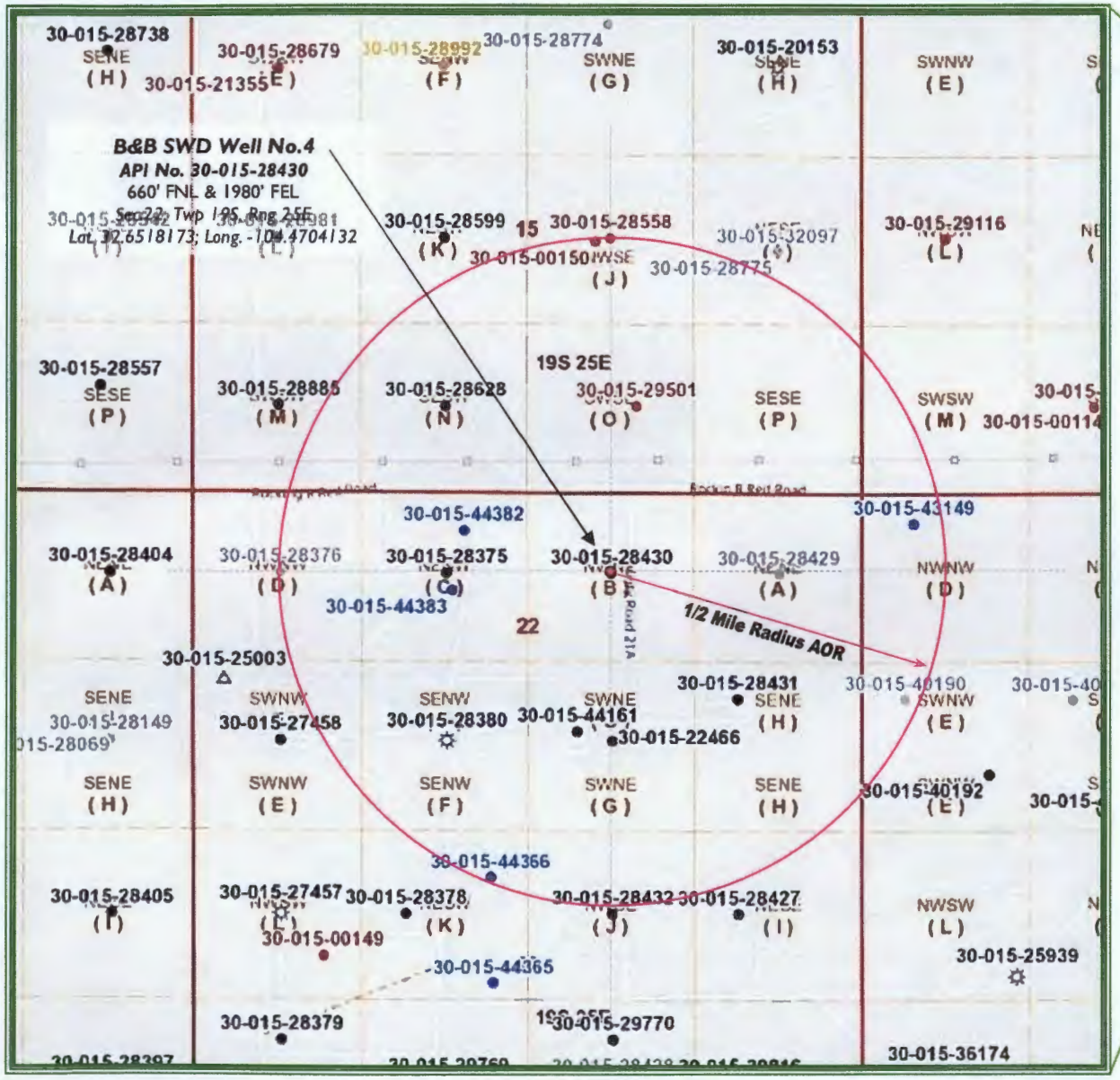
B&B SWD No.4 - Area of Review / 2 Miles

(Attachment to NMOCD Form C-108 - Item V)



B&B No.4 SWD Well No.1 - Area of Review / Overview Map

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)



14.3 miles S/SW of Artesia, NM

Eddy County, New Mexico

PERCUSSION PETROLEUM LLC

SOS Consulting, LLC

C-108 ITEM X – LOGS and AVAILABLE TEST DATA

A log strip from subject well is attached.

LOG STRIP FOLLOWS

Schlumberger

COMPENSATED NEUTRON FORMATION DENSITY

COMPANY MORRIS R. ANTWEIL
WELL B AND B #1
FIELD WILDCAT
COUNTY EDDY STATE NEW MEXICO

COUNTY EDDY
FIELD WILDCAT
LOCATION
WELL B & B #1
COMPANY MORRIS R. ANTWEIL

LOCATION
API SERIAL NO. | SEC. 22 | TWP. 19-S | RANGE 25-E
1980' FNL & 1980' FEL

Other Services: DLL/MSFL

Date	5-13-78					
Run No.	ONE					
Depth—Driller	9486					
Depth—Logger	9488					
Btm. Log Interval	9487					
Top Log Interval	SURFACE					
Casing—Driller	8 5/8@ 1200	@	@	@	@	@
Casing—Logger	1202					
Bit Size	7 7/8					
Type Fluid in Hole	BRINE POLYMER KCL					
Dens.	9.4					
Visc.	34					
pH	9.5					
Fluid Loss	4 ml	ml	ml	ml	ml	ml
Source of Sample	CIRC.					
Rm @ Meas. Temp.	.078 @ 62°F	@ °F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.074 @ 60°F	@ °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.117 @ °F	@ °F	@ °F	@ °F	@ °F	@ °F
Source: Rmf / Rmc	M / C					
Rm @ BHT	.031 @ 156°F	@ °F	@ °F	@ °F	@ °F	@ °F
Circulation Stopped	0230					
Logger on Bottom	0700					
Max. Rec. Temp.	156 °F	°F	°F	°F	°F	°F
Equip. Location	7629 HOBBS					
Recorded By	MILLEN					
Witnessed By Mr.	SHARP					

Permanent Datum: GL
Log Measured From: KB — 12 Ft. Above Perm. Datum
Drilling Measured From: KB
Elev.: 3456

Elev.: K.B. 3468
D.F.
G.L. 3456

RECEIVED
MAY 22 1978
O. C. D.
ARTESIA, OFFICE

Type Log | Depth

REMARKS:
5-22-78

RUN NO.		ONE				
Service Order No.		34817				
Fluid Level		FULL				
Salinity, PPM Cl.		28000				
Speed - F.P.M.		30				
EQUIPMENT DATA						
Dens. Panel		1207				
Dens. Cart.		353				
Dens. Skid.		1110				
Dens. Sonde		307				
Dens. Source		3355				
Dens. Calibrator		1006				
Neut. Panel		285				
Neut. Cart.		1021				
Neut. Source		1629				
Neut. Calibrator		521				
GR Cart.		1126				
Memorizer Panel		905				
Tape Recorder (TTR)		2753				
Depth Encoder (DRE)		118				
Pressure Wheel (CPW)		2732				
Centralizers: Enter Spring, Standoffs, In-line, or None	Type	BOWSPRING				
	No.	1				
	S. O. — Inches					
CALIBRATION DATA						
GR	BKG. CPS	104				
	Source CPS	600				
	Sens. - Cal	165				
	T. C. - Cal	6				
CNL	Short Spacing - Before Log	RATIO				
	Long Spacing - Before Log	2.33				
	Short Spacing - After Log	RATIO				
	Long Spacing - After Log	2.31				
FDC	P_1 — Before Log	121 X 4				
	P_2 — Before Log	192 X 4				
	P_1 — After Log	120 X 4				
	P_2 — After Log	187 X 4				

LOGGING DATA

DEPTH		CNP			FDC				GR			
Top	Bottom	Porosity Scale	Matrix	Auto Corr. or Hole Size Setting	Porosity Scale	Grain Density	Liquid Density	Hole Fluid	Sens. Logged	T. C.	Zero. Div. Left	Scale Per 100 Div.
SURF.	1202	30 -10	LS-CH						165	1	0	100
1202	9486	30 -10	LS-OH	AUTO	30 -10	2.71	1.1	LIQ	165	2	0	100

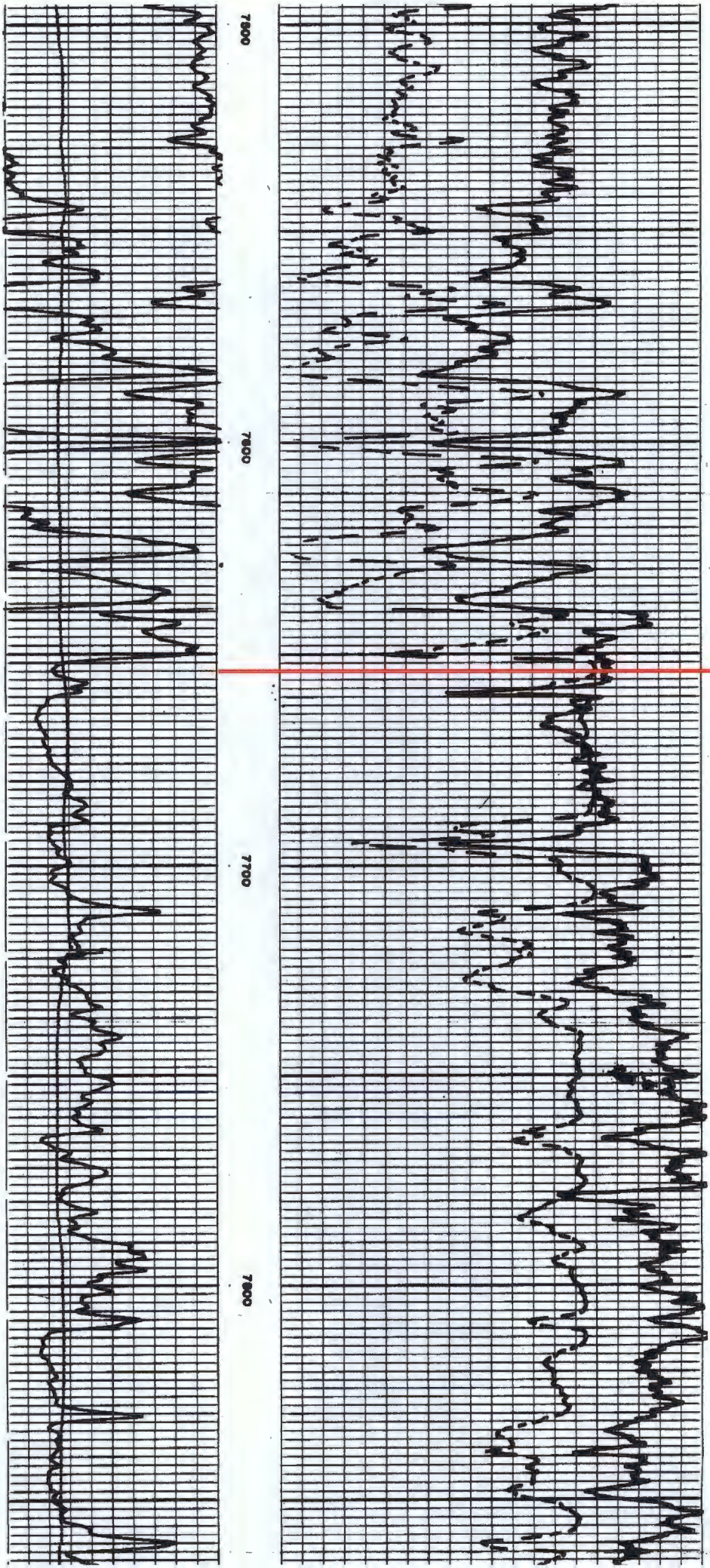
CALIPER DIAM. IN INCHES
6 — 16

GAMMA RAY API UNITS
0 — 100
100 — 200

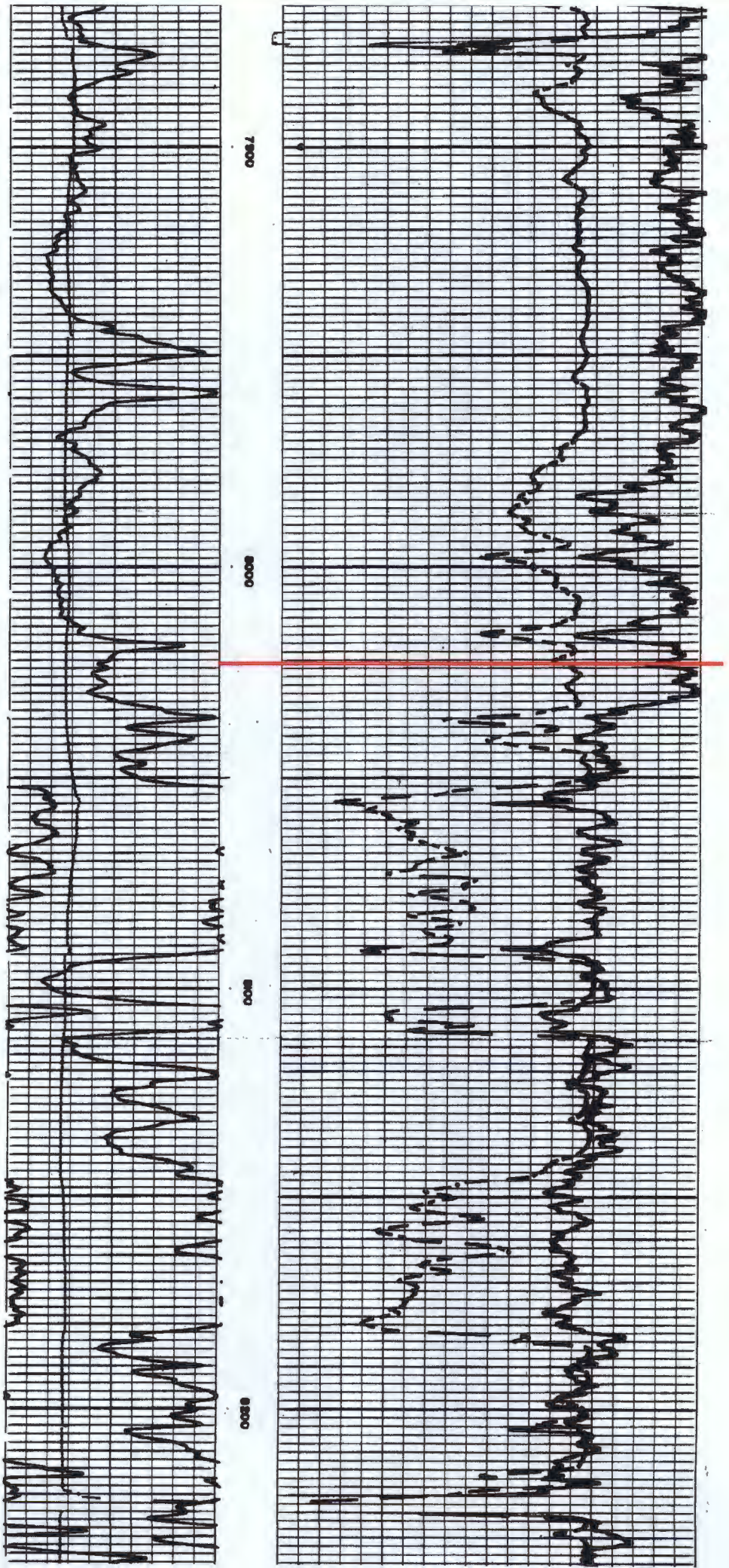
CORRECTION GRAMS/CC
Use this scale when correction curve is presented in Track 2
0 — +.25

BULK DENSITY GRAMS/CC
2.0 — 2.5 — 3.0
1.0 — 1.5 — 2.0

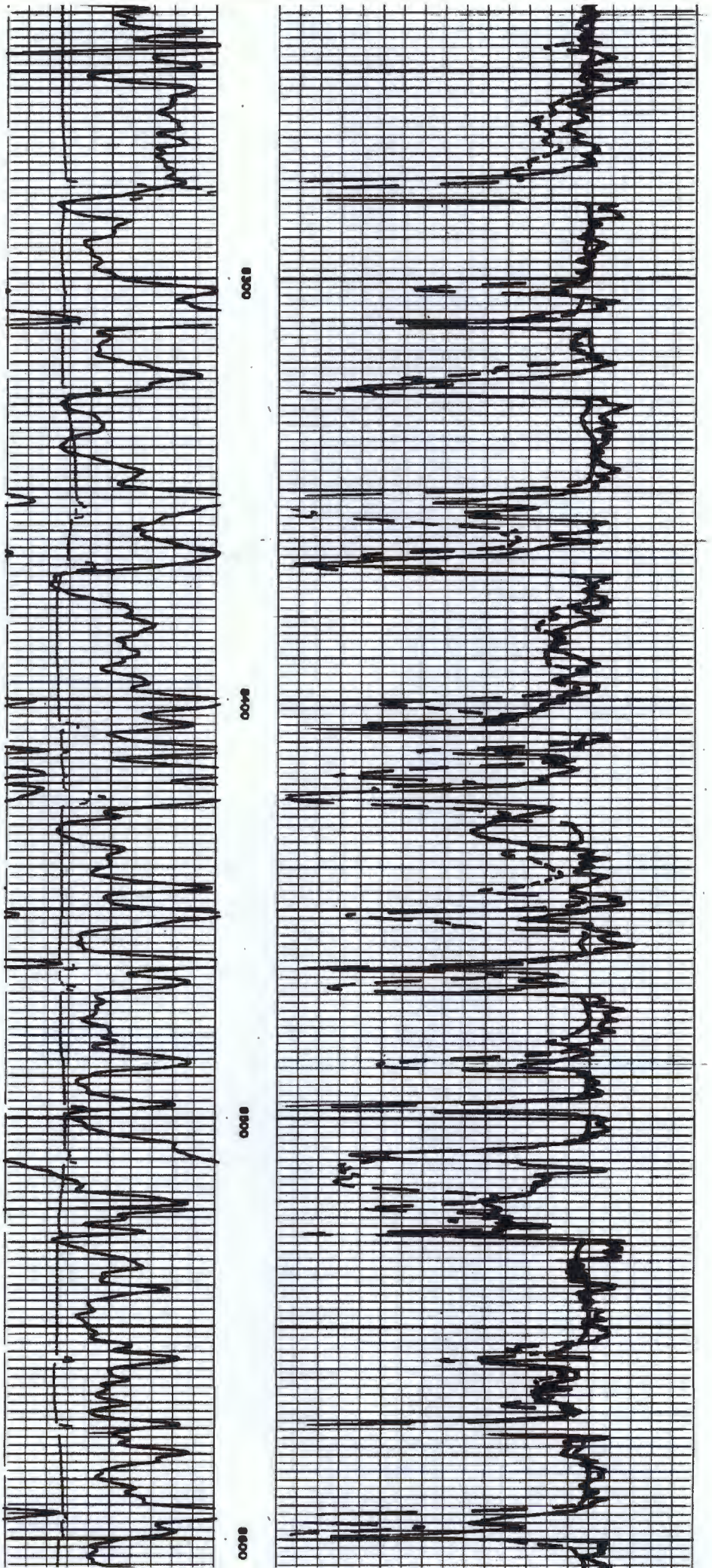
CNL POROSITY—%
30 — 20 — 10 — 0 — -10



TOP OF PROPOSED INTERVAL



BOTTOM OF PROPOSED INTERVAL


8300
8400
8500

C-108 ITEM VII – PROPOSED OPERATION

B&B No.4 SWD

Private Use SWD Facility

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take approximately 6-8 weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval but at a different location from the well. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment.

Configure for Salt Water Disposal

Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity.

Operational Summary

The B&B SWD well will be for Percussion's area production from Gloieta / Yeso wells.

The SWD facility will not be fenced. Primary water transportation will be via pipeline but offloading hookups will be available so that trucks may access for load disposal in needed.

The well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be monitored for pressure.

The tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 4,500 bpd and an average of 3,000 bpd at a maximum surface injection pressure of 1530 psi (.2 psi/ft gradient – maximum pressure will be adjusted If the top of interval is modified after well logs are run).

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD will be notified within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as necessary and appropriate.

C-108 ITEM VII – PRODUCED WATER ANAYLSES

Item VII.4 – Water Analysis of Source Zone Water

Glorieta/ Yeso
Bone Spring

Item VII.5 – Water Analysis of Disposal Zone Water

Cisco/ Canyon
(and/or Penn)

Water Analyses follow this page.

C-108 Item VII.5 - Produced Water Data

Percussion Petroleum, LLC - BB No.4 SWD Project

SOURCE ZONE

GLO/YESO

Lab ID

Sample ID 1146

Sample No

API No 3001524754

Well Name PLATT PA 009

Location ULSTR 26 18 S 26 E **Lat / Long** 32.71216 -104.35742

330 S 990 W **County** Eddy

Operator (when sampled) Yates Petroleum Corp.

Field ATOKA Unit M

Sample Date 8/4/1984 Analysis Date

Sample Source Wellhead Depth (if known)

Water Typ Produced Water

ph	7.5	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	1800
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	120382	resistivity_ohm_cm_temp_	
tds_mgL_180C		conductivity	
chloride_mgL	113000	conductivity_temp_F	
sodium_mgL	71415	carbonate_mgL	0
calcium_mgL	2560	bicarbonate_mgL	476
iron_mgL	0	sulfate_mgL	2001
barium_mgL		hydroxide_mgL	
magnesium_mgL	0	h2s_mgL	0
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)

SOS Consulting, LLC

C-108 Item VII.5 - Produced Water Data

Percussion Petroleum, LLC - BB No.4 SWD Project

SOURCE ZONE

GLO/YESO

Lab ID

Sample ID 1207

API No 3001524619

Well Name PLATT PA 008 Sample No

Location ULSTR 26 18 S 26 E **Lat / Long** 32.71245 -104.35329

430 S 2260 W **County** Eddy

Operator (when sampled) Yates Petroleum Corporation

Field ATOKA Unit N

Sample Date 1/19/1985 Analysis Date

Sample Source well head Depth (if known)

Water Typ Produced Water

ph	6	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	11500
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	136324	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	121000	conductivity_temp_F	
sodium_mgL	61571	carbonate_mgL	
calcium_mgL	4160	bicarbonate_mgL	104
iron_mgL	0	sulfate_mgL	3720
barium_mgL		hydroxide_mgL	
magnesium_mgL	7340	h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)

SOS Consulting, LLC

C-108 Item VII.5 - Produced Water Data

Percussion Petroleum, LLC - BB No.4 SWD Project

SOURCE ZONE

BONE SPRING

Lab ID

Sample ID 5847

Sample No

API No 3001520225

Well Name BIG EDDY UNIT 012

Location ULSTR 21 20 S 31 E **Lat / Long** 32.56399 -103.87994

660 N 660 W **County** Eddy

Operator (when sampled) MALLON OIL COMPANY

Field BIG EDDY Unit D

Sample Date 8/27/1999 Analysis Date 8/31/1999

Sample Source

Water Typ

Depth (if known)

ph	5.2	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity	1.125	hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	181697	resistivity_ohm_cm_temp_	
tds_mgL_180C		conductivity	
chloride_mgL	123750	conductivity_temp_F	
sodium_mgL	73895.6	carbonate_mgL	
calcium_mgL	5625	bicarbonate_mgL	13.725
iron_mgL	337.5	sulfate_mgL	787.5
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	0
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)

SOS Consulting, LLC

C-108 Item VII.5 - Produced Water Data

Percussion Petroleum, LLC - B&B Well No.4 SWD Project

DISPOSAL ZONE

CIS

Lab ID

Sample ID 5945

Sample No

API No 3001526468

Well Name JOHN AGU 002

Location ULSTR 14 20 S 24 E **Lat / Long** 32.57883 -104.55197

660 N 660 E **County** Eddy

Operator (when sampled)

Field DAGGER DRAW Unit A

Sample Date 5/13/2000 Analysis Date

Sample Source Depth (if known)

Water Typ

ph	6.1	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity	1.05	hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	216236	resistivity_ohm_cm_temp_	
tds_mgL_180C		conductivity	
chloride_mgL	53321	conductivity_temp_F	
sodium_mgL		carbonate_mgL	
calcium_mgL	4576	bicarbonate_mgL	72619
iron_mgL	1000	sulfate_mgL	952
barium_mgL	0	hydroxide_mgL	
magnesium_mgL	463	h2s_mgL	0
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)

SOS Consulting, LLC

C-108 - Item VIII
Geological Data

The Cisco Formation (Upper Penn) is a gray micritic (fine grained) fossiliferous limestone with vugular porosity as well as dolomite. The reservoirs in this area are usually limited in size with up dip porosity loss due to shelf margin carbonate build up. The upper portion becomes very shaley and is not proposed for injection.

The [Pennsylvanian] Canyon formation consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone interbedded with shale and is generally 150 to 200 feet in thickness.

The combined zones offer some good porosity in the proposed injection interval located from 7654 feet to 8023 feet with some very good porosity interspersed throughout the overall interval.

The Cisco is overlain by the Wolfcamp and the Canyon is underlain by the Strawn and Atoka. (See Pool Map and Data exhibit included.)

Fresh water in the area is generally available from the karstic San Andres limestone formation which is a prime example of an artesian recharged aquifer. Based on State Engineer's records for water wells in Sections 21 & 22, Twp 19S, Rng 25E, groundwater is found from 130 feet to 220 feet, average depth 175 feet.

There are 3 water wells located within one mile of the proposed SWD. 1 or 2 will be sampled and analyses will be forwarded upon receipt.

Please note that while the Cisco/ Canyon intervals have been productive in the past, operators have permanently abandoned those zones and have recompleted wells into the Glorieta/ Yeso intervals. There is no remaining Cisco/ Canyon production in a one-mile area of review.

There is an existing (inactive) Cisco/ Canyon SWD located to the southwest of the proposed well, just outside the 1/2 mile area of review. The well was permitted and drilled as an SWD by Anadarko; subsequently sold to Chevron. The well operated from 1985 to 2013.

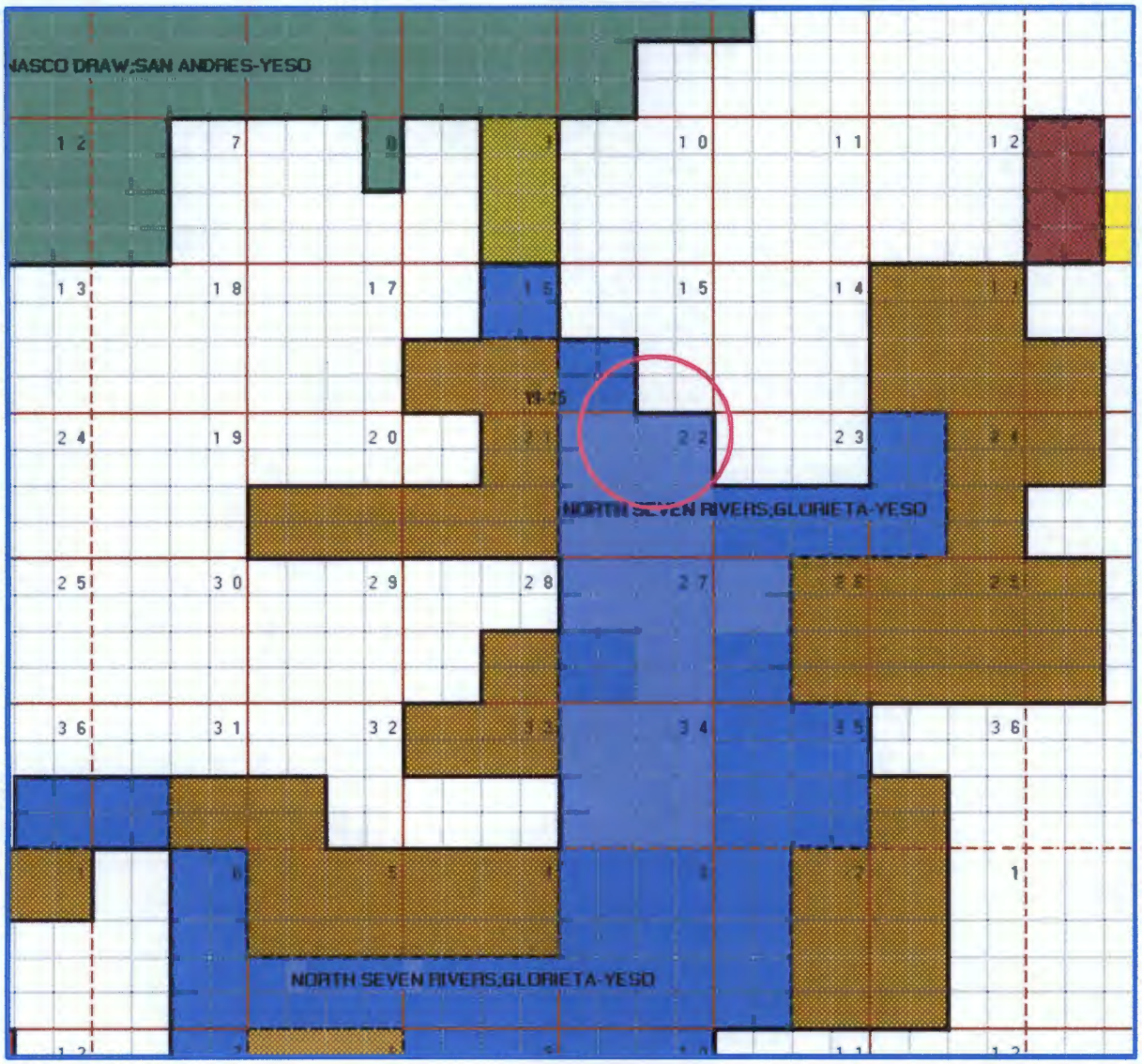
API 30-015-25003: SWD Interval 7800' to 8040'.

C-108 – Item VIII – Geologic Data

SUPPLEMENTAL INFORMATION – POOL DATA

GLORIETA/ YESO POOLS IN REGION

(Overlying Disposal Formation)



Pool Maps Courtesy of Paul Kautz

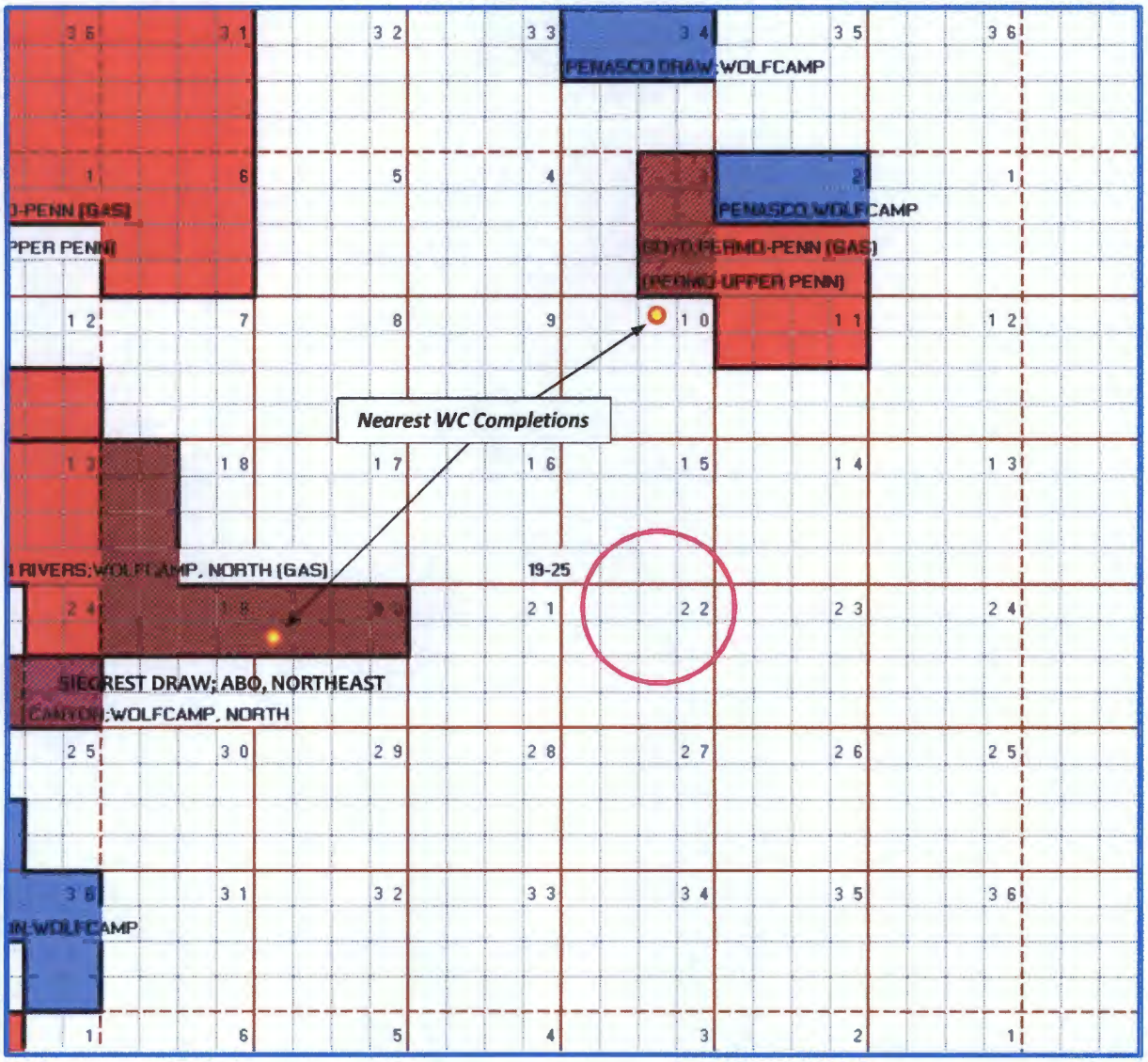
SOS Consulting, LLC

C-108 – Item VIII – Geologic Data

SUPPLEMENTAL INFORMATION – POOL DATA

ABO & WOLFCAMP POOLS IN REGION

(Overlying Proposed Disposal Formations)



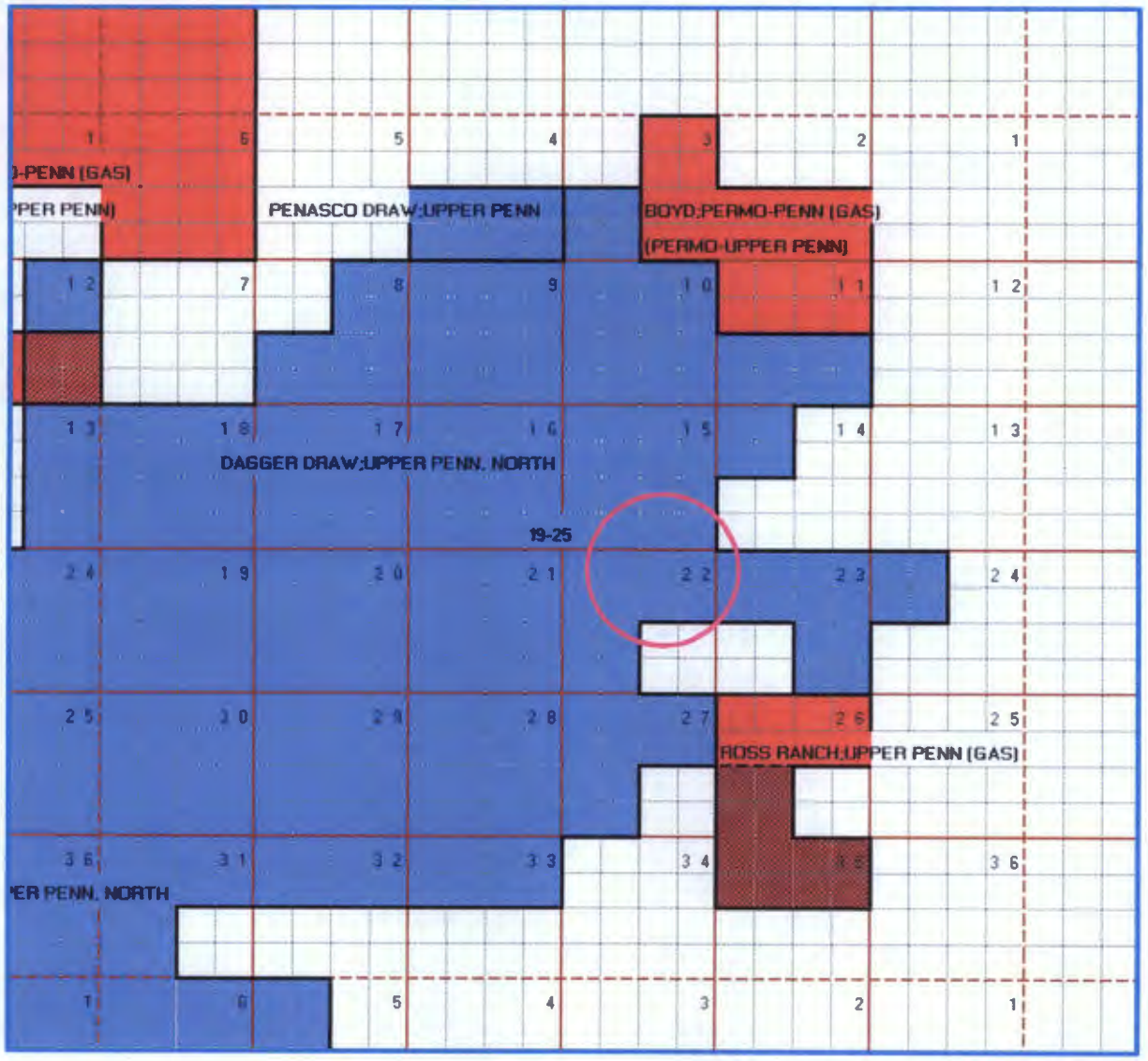
Pool Maps Courtesy of Paul Kautz

SOS Consulting, LLC

C-108 – Item VIII – Geologic Data

SUPPLEMENTAL INFORMATION – POOL DATA

PENNSYLVANIAN POOLS IN REGION



Pool Maps Courtesy of Paul Kautz

SOS Consulting, LLC

C-108 ITEM XI – WATER WELLS IN AOR

3 WATER WELLS WITHIN ONE MILE OF PROPOSED SWD WELL.

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(acre ft per annum)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	q q q 64 16 4	Sec	Twn	Rng	X	Y
RA 02909		DOM	3	TAYLOR ROSS	ED	RA 02909			Shallow	1 3	22	19S	25E	548864	3611989*
RA 05450		STK	0	LEATHERWOOD DRILLING CO	CH	RA 05450			Shallow	4 2	15	19S	25E	550057	3614015*
~~RA 05800~~		~~STK~~	~~3~~	~~JAMES H AND BETTY R HOWELL REVOCABLE TRUST~~	~~ED~~	~~RA 05800~~			~~Shallow~~	~~2 2~~	~~10~~	~~19S~~	~~25E~~	~~548442~~	~~3614424*~~
RA 08986		PRO	0	YATES PETROLEUM CORP.	ED	RA 08986			Shallow	1 3 3	22	19S	25E	548824	3611507
~~RA 10407~~		~~DOL~~	~~0~~	~~JOAN MULLARKEY~~	~~ED~~	~~RA 10407~~			~~Shallow~~	~~4 2~~	~~28~~	~~19S~~	~~25E~~	~~551078~~	~~3612408*~~
RA 11639		PRO	0	YATES PETROLEUM CORPORATION	ED	RA 08986			Shallow	1 3 3	22	19S	25E	548824	3611507

Record Count: 6

PLSS Search:

Section(s): 14, 15, 16, 21, 22, 23 **Township:** 19S **Range:** 25E

Sorted by: File Number

All PODs Shown on WW Locator Map - Next Page...

"UTM location was derived from PLSS - see Help

McMillan, Michael, EMNRD

From: ben@sosconsulting.us
Sent: Tuesday, February 27, 2018 4:04 PM
To: McMillan, Michael, EMNRD
Subject: RE: Percussion Operating Osage Boyd Fed Com #8 water sample

Actually it is, this SWD would also serve to provide disposal for their same production in the area. I can send but it would be the same ones.

Let me know if you need it for the file.

Thanks,
Ben

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Tuesday, February 27, 2018 4:50 PM
To: Ben Stone <ben@sosconsulting.us>
Subject: Percussion Operating Osage Boyd Fed Com #8 water sample

Ben:
I need a groundwater sample for the Percussion Operating Osage Boyd Fed Com #8, or is the water sample from the B&B applicable to this application
Mike

Michael McMillan
1220 South St. Francis
Santa Fe, New Mexico
505-476-3448
Michael.mcmillan@state.nm.us

C-108 Item XI

Water Wells Within One Mile

B&B No.4 SWD - Water Well Locator Map

Sample at least 1 well (of 3 in circle) if possible in Area of Review.

Samples taken - Analyses will be forwarded upon receipt...

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Percussion Petroleum	**BILL TO**	
Project Manager:	Lelan	P.O. #:	
Address:	919 Milam Ste 2475	Company:	
City:	Houston State: TX Zip: 77002	Attn:	
Phone #:	281-908-1752 Fax #:	Address:	
Project #:	[redacted] Project Owner:	City:	
Project Name:	B+B 22 #4 SWD	State: Zip:	
Project Location:		Phone #:	
Sampler Name:		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CL	TDS										
H800252																										
1	32° 39' 44" N	G	1	✓									1-21-18	8:00	✓	✓										
2	32° 38' 52" N	G	1	✓									1	8:00	✓	✓										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Brett Medrano	Date: 1-23-18 Time: 2:50	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) 7.1°C	Sample Condition: Cool ☐ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO #75	REMARKS: Rush!
Sampler - UPS - Bus - Other: Corrected 7.3°C			Lelan@percussionpetroleum.com

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 24, 2018

LELAN

PERCUSSION PETROLEUM

919 MILAM , STE 2475

HOUSTON, TX 77002

RE: B & B 22 #4 SWD

Enclosed are the results of analyses for samples received by the laboratory on 01/23/18 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PERCUSSION PETROLEUM
LELAN
919 MILAM , STE 2475
HOUSTON TX, 77002
Fax To:

Received:	01/23/2018	Sampling Date:	01/21/2018
Reported:	01/24/2018	Sampling Type:	Water
Project Name:	B & B 22 #4 SWD	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: 32.39' 44" N (H800252-01)

Chloride, SM4500Cl-B mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**36.0**	4.00	01/24/2018	ND	104	104	100	0.00	

TDS 160.1 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**2270**	5.00	01/24/2018	ND	207	97.2	213	3.25	

Sample ID: 32.38' 52" N (H800252-02)

Chloride, SM4500Cl-B mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**20.0**	4.00	01/24/2018	ND	104	104	100	0.00	

TDS 160.1 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1980**	5.00	01/24/2018	ND	207	97.2	213	3.25	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

C-108 ITEM XI – WATER WELLS IN AOR

Depth to Ground Water

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 02909		ED	1	3		22	19S	25E	548864	3611989*	188	130	58
RA 08986		ED	1	3	3	22	19S	25E	548825	3611507	320	220	100

Average Depth to Water: **175 feet**

Minimum Depth: **130 feet**

Maximum Depth: **220 feet**

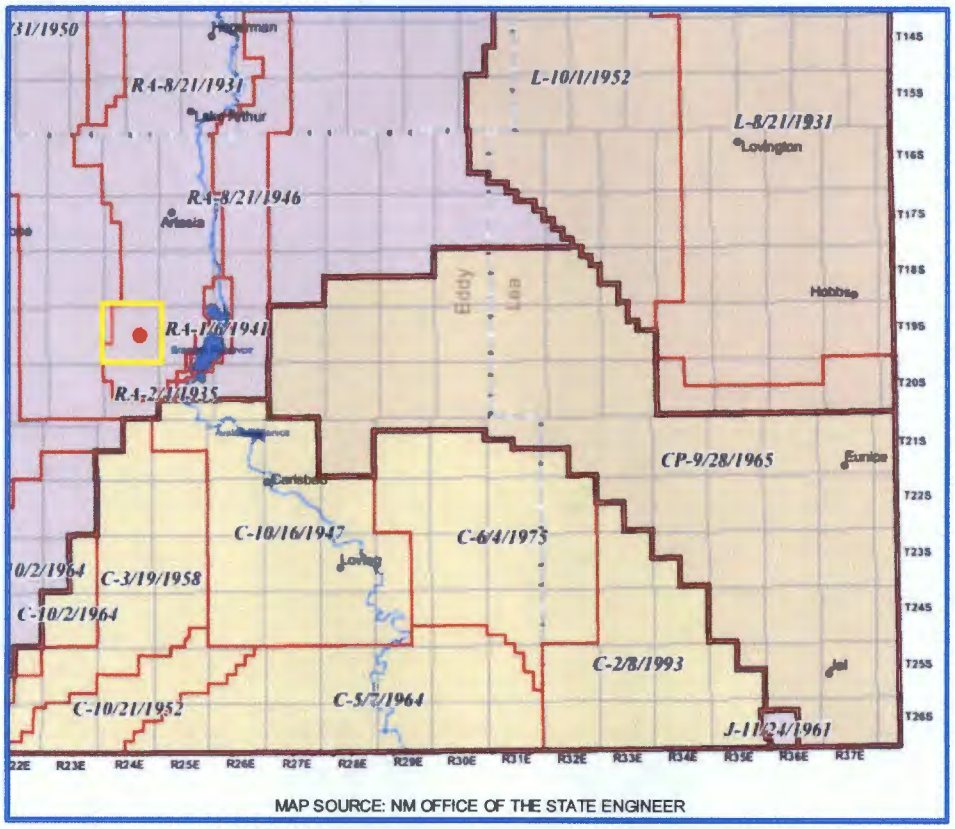
Record Count: 2

PLSS Search:

Section(s): 21, 22 **Township:** 19S **Range:** 25E

C-108 - Item XI

Groundwater Basins - Water Column / Depth to Groundwater



The subject well is located within the Roswell Artesian Basin.

Fresh water in the area is generally available from the karstic San Andres limestone formation which is a prime example of an artesian recharged aquifer.

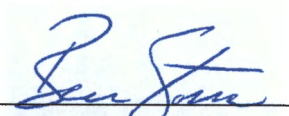
State Engineer's records show there is fresh water wells in the area with an depth of 200 feet and average depth to water at 175 feet.

There are 3 water wells located within one mile of the proposed SWD. Samples will be taken of at least one and analysis forwarded when available.

SOS Consulting, LLC

C-108 ITEM XII – GEOLOGIC AFFIRMATION

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.



Ben Stone, Partner
SOS Consulting, LLC

Project: Percussion Petroleum Operating, LLC
B&B No.4 SWD
Reviewed 12/13/2017

C-108 ITEM XIII – PROOF OF NOTIFICATION

IDENTIFICATION AND NOTIFICATION OF INTERESTED PARTIES

Exhibits for Section

Leasehold Plat

List of Interested Parties

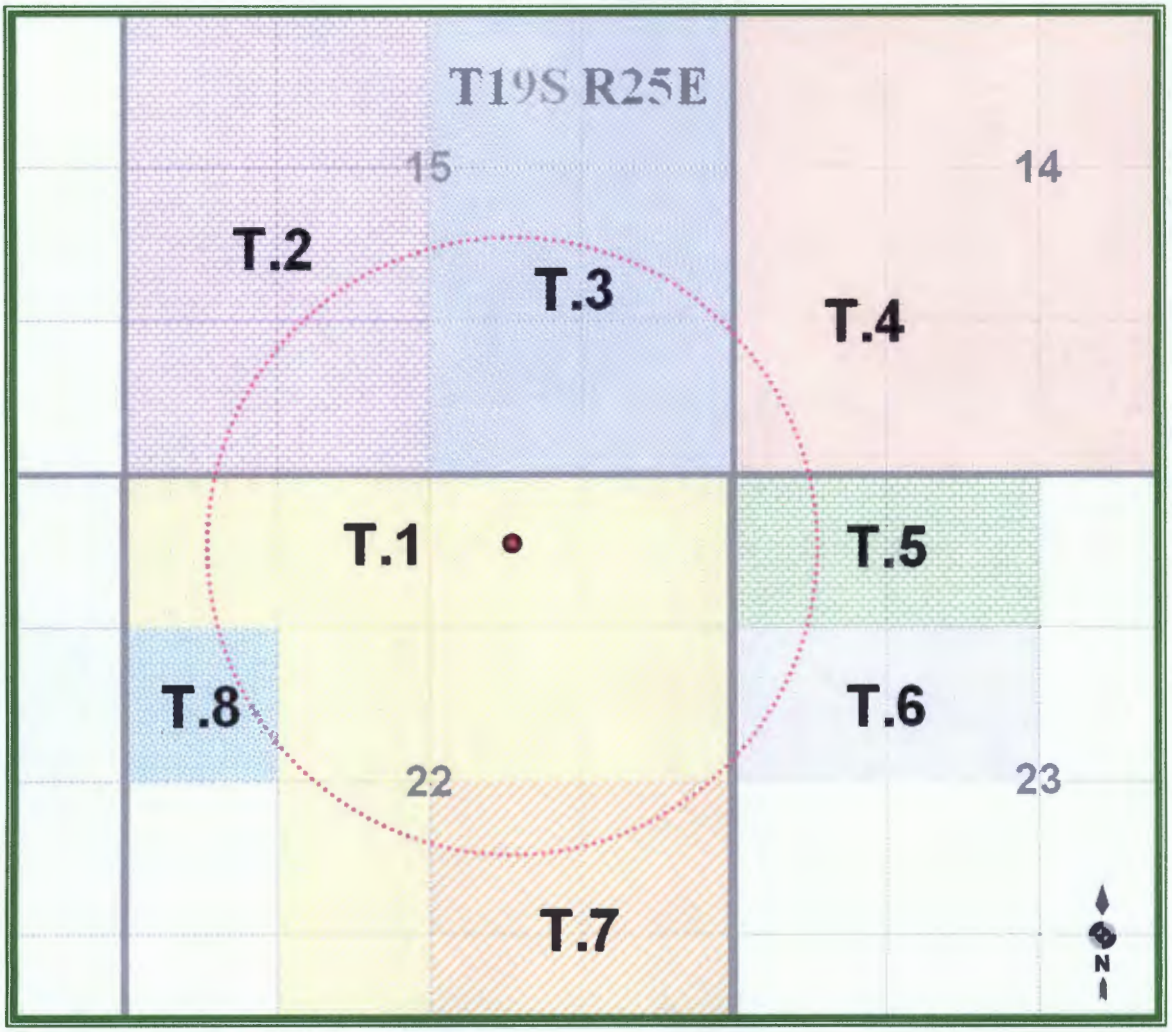
Notification Letter to Interested Parties

Proof of Certified Mailing

Published Legal Notice

B&B SWD Well No.4 - Leasehold Plat

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)



PERCUSSION PETROLEUM LLC

LEGEND

T.1 – Jerome Hugh Jones, et al – Percussion; EOG 'Y'

T.2 – Private – Percussion Petroleum, LLC

T.3 – Private – Percussion Petroleum, LLC

T.4 – Private – Percussion Petroleum, LLC

T.5 – Private – Percussion Petroleum, LLC

T.6 – Private – Percussion Petroleum, LLC

T.7 – Private – Percussion Petroleum, LLC

T.8 – Private – Percussion; Tactical Oil & Gas, LLC

SOS Consulting, LLC

C-108 ITEM XIII – PROOF OF NOTIFICATION
INTERESTED PARTIES LIST

SURFACE OWNER

1 JEROME HUGH HONES, ET AL
P.O. Box 216
Lakewood, NM 88254-0216
Certified: 7015 3010 0001 3789 7848

OFFSET MINERALS LESSEES and OPERATORS (All Notified via USPS Certified Mail)

Private Lease (T.1 on Leasehold Plat)
Lessses / Operators
PERCUSSION PETROLEUM, LLC (Applicant)
919 Milam, Ste.2475
Houston, TX 77002

2 EOG 'Y' RESOURCES, INC.
105 S. 4th Street
Artesia, NM 88210
Certified: 7015 3010 0001 3789 7855

Private Leases (T.2 – T.7 on Leasehold Plat)
Lessee / Operator
PERCUSSION PETROLEUM, LLC
919 Milam, Ste.2475
Houston, TX 77002

Private Lease (T.8 on Leasehold Plat)
Lessee & Operator
PERCUSSION PETROLEUM, LLC
919 Milam, Ste.2475
Houston, TX 77002

Operator
3 TACTICAL OIL & GAS, LLC
P.O. Box 12874
Odessa, TX 79768
Certified: 7015 3010 0001 3789 7435

REGULATORY

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed original and copy)
1220 S. St. Francis Dr.
Santa Fe, NM 87505

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed copy)
811 S. First St.
Artesia, NM 88210

January 19, 2018

NOTIFICATION TO INTERESTED PARTIES
via U.S. Certified Mail – Return Receipt Requested

To Whom It May Concern:

Percussion Petroleum Operating, LLC, Houston, Texas, has made application to the New Mexico Oil Conservation Division to convert and complete for salt water disposal the B&B Well No.4. The proposed SWD will be for private produced water disposal from Percussion's area operations. As indicated in the notice below, the well is located in Section 22, Township 19 South, Range 25 East in Eddy County, New Mexico.

The published notice states that the interval will be from 7654 feet to 8023 feet.

Following is the notice published in the Artesia Daily Press, New Mexico on or about January 21, 2018.

LEGAL NOTICE

Percussion Petroleum Operating, LLC – 919 Milam, Ste.2475, Houston, Texas 77002, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to covert a well for salt water disposal. The proposed conversion will be on the B&B No.4 which is located 660' FNL and 1980' FEL, Section 22, Township 19 South, Range 25 East, Eddy County, New Mexico; approximately 14.3 miles south/ southeast of Artesia, NM.

Produced water from Percussion's area production will be privately disposed into the Cisco and Canyon formations at a maximum interval depth of 7654 feet to 8023 feet at a maximum surface pressure of 1530 psi and a rate limited only by such pressure.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

You have been identified as a party who may be interested as an offset lessee or operator.

You are entitled to a full copy of the application. A full copy in PDF format is posted on the SOS Consulting ***ShareFile*** site and is available for immediate download.

Use the URL link https://sosconsulting.sharefile.com/d-sec9509081a94adbb

(Please Note: The ShareFile service is powered by Citrix Systems and is completely secure.*)

The link to this file will be active for 30 days from the date of this letter. Your company can access and download the file a maximum of five (5) times. (Copies may be downloaded and shared as needed among your company.)

Alternatively, you may call SOS Consulting, LLC at 903-488-9850, or email info@sosconsulting.us, and the same PDF file copy will be expedited to you via email.

Please use the subject "**B&B SWD Jan 2018 PDF Copy Request**".

Thank you for your attention in this matter.

Best regards,

Ben Stone, SOS Consulting, LLC
Agent for Percussion Petroleum Operating, LLC

Cc: Application File

SOS Consulting is committed to providing superior quality work using technology to assist clients and interested parties in obtaining the documentation required. SOS will continue to utilize methods for reducing papers copies and are less energy and resource intensive.

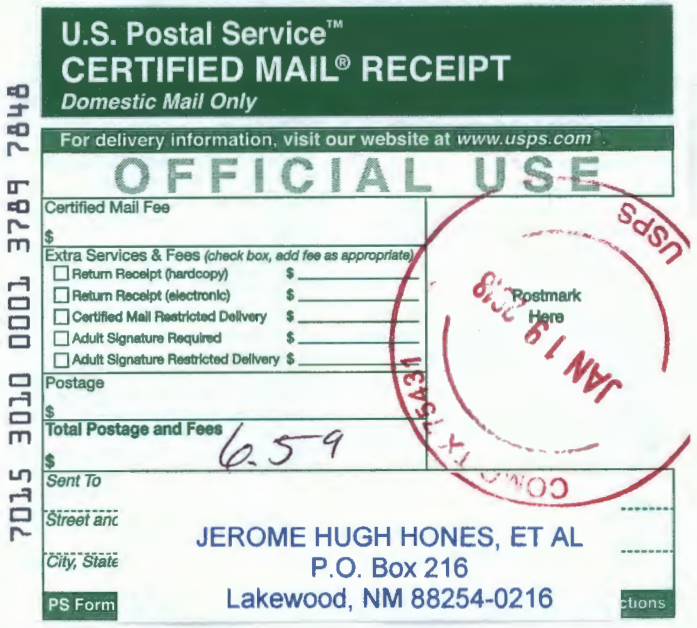
We hope you'll partner with us and appreciate these efforts.

* You will be asked for your email, name and company.
This will not be used by anyone except keeping track of the file downloads.
You will not be solicited by SOS or anyone else. Data is stored on Citrix Systems servers only.

citrix ShareFile

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)



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- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$ 6.59

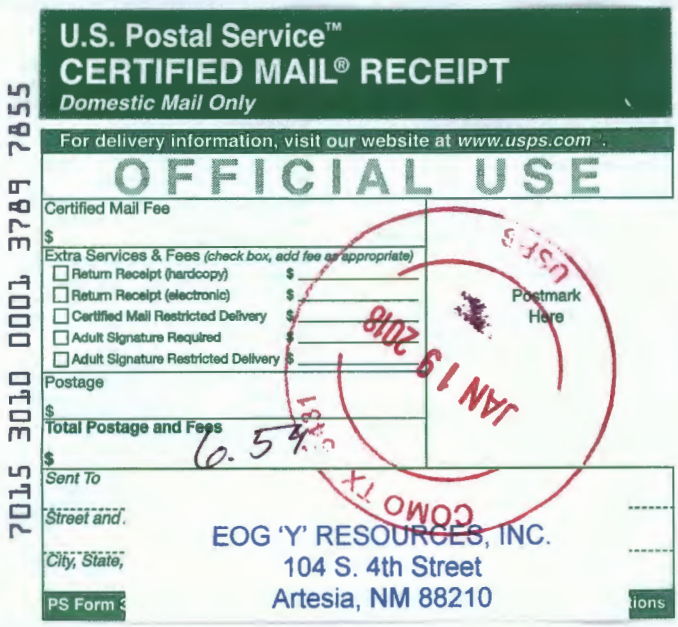
Postmark Here
JAN 19 2018

Sent To
Street and
City, State

JEROME HUGH HONES, ET AL
P.O. Box 216
Lakewood, NM 88254-0216

PS Form ctions

7015 3010 0001 3789 7848



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- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$ 6.54

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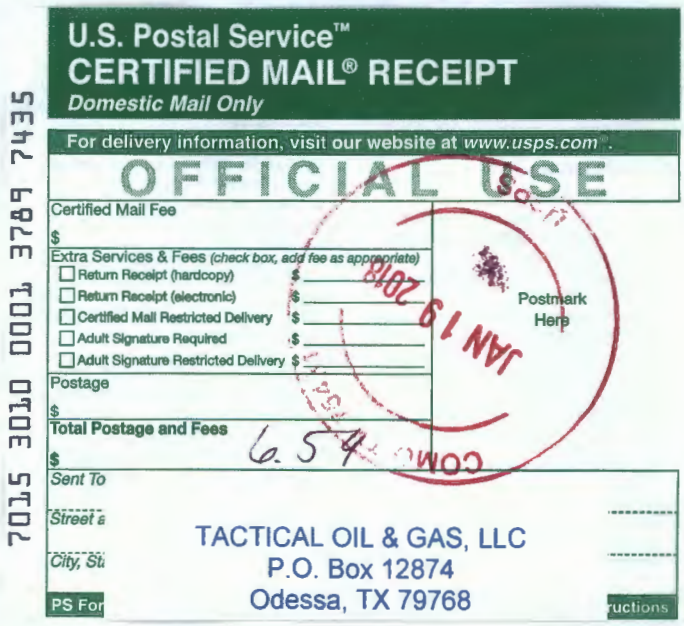
JAN 19 2018

Sent To
Street and
City, State,

EOG 'Y' RESOURCES, INC.
104 S. 4th Street
Artesia, NM 88210

PS Form tions

7015 3010 0001 3789 7855



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OFFICIAL USE

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- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$ 6.54

Postmark Here
JAN 19 2018

Sent To
Street a
City, St

TACTICAL OIL & GAS, LLC
P.O. Box 12874
Odessa, TX 79768

PS For ructions

7015 3010 0001 3789 7435

C-108 - Item XIV

Proof of Notice – Legal Notice
Newspaper of General Circulation

Legal Notice

Percussion Petroleum Operating, LLC – 919 Milam, Ste.2475, Houston, Texas 77002, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to covert a well for salt water disposal. The proposed conversion will be on the B&B No.4 which is located 660' FNL and 1980' FEL, Section 22, Township 19 South, Range 25 East, Eddy County, New Mexico; approximately 14.3 miles south/ southeast of Artesia, NM.

Produced water from Percussion's area production will be privately disposed into the Cisco and Canyon formations at a maximum interval depth of 7654feet to 8023 feet at a maximum surface pressure of 1530 psi and a rate limited only by such pressure.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

Published in the Artesia Daily Press, Artesia, N.M., Jan. 21, 2018 Legal No. 24539.

The above is the "Proof Copy" sent from the Artesia Daily Press.
The affidavit of publication will be forwarded as soon as it is received.

Affidavit of Publication

No. 24539

State of New Mexico

County of Eddy:

Danny Scott

being duly sworn says that she is the **Publisher**

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	January 21, 2018
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	

Subscribed and sworn before me this

22nd day of January 2018

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2019

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

Legal Notice

Percussion Petroleum Operating, LLC – 919 Milam, Ste.2475, Houston, Texas 77002, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to covert a well for salt water disposal. The proposed conversion will be on the B&B No.4 which is located 660' FNL and 1980' FEL, Section 22, Township 19 South, Range 25 East, Eddy County, New Mexico; approximately 14.3 miles south/ southeast of Artesia, NM.

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Published in the Artesia Daily Press, Artesia, N.M., Jan. 21, 2018 Legal No. 24539.

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-28430
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: B&B 22
1. Type of Well: Oil Well ☒ Gas Well ☐ Other
8. Well Number: 004
2. Name of Operator: Percussion Petroleum Operating, LLC
9. OGRID Number: 371755
3. Address of Operator: 919 Milam, Ste.2475, Houston, TX 77002
10. Pool name or Wildcat: Dagger Draw; Upper Penn, North

4. Well Location
Unit Letter B : 660 feet from the North line and 1980 feet from the East line
Section 22 Township 19-S Range 25-E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3471' G.R.

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:		NAME CHANGE	☒	OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Percussion Petroleum Operating proposes to change the name and number of this well when approved as an SWD.

The complete well name shall be the **B&B 22 SWD No.1**.

Change will be implemented immediately upon approval of pending SWD permit and C-101.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Agent/consultant DATE 2/28/2018

Type or print name _____ E-mail address: ben@sosconsulting.us PHONE: 903-488-9850

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any):

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

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-28430	96186	SWD; Cisco - Canyon

[4] Property Code	[5] Property Name	[6] Well Number
TBD	B&B 22 SWD	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
371755	Percussion Petroleum Operating, LLC	3471 feet

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	19-S	25-E		660	North	1980	East	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
n/a	n/a	n/a	

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 2/28/2018 Date

Benjamin E. Stone
Printed Name

SOS Consulting, LLC; agent for:
Percussion Petro. Operating, LLC

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

April 1, 1995
Date of Survey

Signature and Seal of Professional Surveyor:

Dan Reddy

NM Cert. No.5412
Certificate Number

FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V16.2]

DATE RECORD: First Rec: 4/23/2018 **Admin Complete:** _____ **or Suspended:** _____ Add. Request/Reply: _____

ORDER TYPE: WFX / PMX / (SWD) Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No. 4 Well Name(s): BFB

API : 30-0 15-28430 Spud Date: 1-07-1957 New or Old (EPA): N (*UIC Class II Primacy 03/07/1982*)

Footages 660 FNL 1980 FEL Lot ___ or Unit B Sec 22 Tsp 18S Rge 31E County Eddy

General Location: ~15 miles S/Artesia Pool: SWD; Cisco-Canyon Pool No.: 96188

BLM 100K Map: Artesia Operator: Percussion Petroleum Operating LLC OGRID: 371755 Contact: _____

COMPLIANCE RULE 5.9: Total Wells: 142 Inactive: 3 **Fincl Assur:** OK Compl. Order? N/A **IS 5.9 OK?** Y **Date:** 3-13-2018

WELL FILE REVIEWED ◯ Current Status: Active

WELL DIAGRAMS: NEW: Proposed ◯ or **RE-ENTER:** Before Conv. ✓ After Conv. ✓ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __ Surface	14 3/4" / 9 5/8"	1120		1200	Surface/Visual
Planned __or Existing __ Interm/Prod	8 3/4 / 7"	8200 ~~9000~~		1250	Surface/Visual
Planned __or Existing __ Interm/Prod					
Planned __or Existing __ Prod/Liner					
Planned __or Existing __ Liner					
Planned __or Existing __ OH / (PERF)	7654-8023 ~~7654-8150~~		Inj Length		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		CS	7646
Confining Unit: Litho. Struc. Por.			
Proposed Inj Interval TOP:		7654	
Proposed Inj Interval BOTTOM:		8023	
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD 8206 PBTD 8115

NEW TD _____ NEW PBTD _____

NEW Open Hole ◯ or NEW Perfs ✓

Tubing Size 4 1/2 in. Inter Coated? Y

Proposed Packer Depth 7554 ft

Min. Packer Depth 7554 (100-ft limit)

Proposed Max. Surface Press. 1530 psi

Admin. Inj. Press. 1531 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P MA Noticed? ___ BLM Sec Ord ◯ WIPP ◯ Noticed? ___ Salt/Salado T: ___ B: ___ **NW:** Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth 220' **HYDRO AFFIRM STATEMENT By Qualified Person** ✓

NMOSE Basin: Lwell-Artesia CAPITAN REEF: thru ___ adj NA No. GW Wells in 1-Mile Radius? 2 FW Analysis? Y

Disposal Fluid: Formation Source(s) Glorieta-yeso; Bone Springs Analysis? Y On Lease ◯ Operator Only ✓ or Commercial ◯

Disposal Interval: Inject Rate (Avg/Max BWPD): 3000 / 4500 Protectable Waters? MA Source: _____ System: Closed or Open

HC Potential: Producing Interval? ___ Formerly Producing? Y Method: Logs/DST/P&A/Other _____ 2-Mi Radius Pool Map ✓

AOR Wells: 1/2-M Radius Map and Well List? Y **No. Penetrating Wells:** 8 [AOR Horizontals: ___ AOR SWDs: ___]

Penetrating Wells: No. Active Wells 6 Num Repairs? ___ on which well(s)? _____ Diagrams? ___

Penetrating Wells: No. P&A Wells 2 Num Repairs? ___ on which well(s)? _____ Diagrams? Y

NOTICE: Newspaper Date 1-21-2018 Mineral Owner Percussion Surface Owner Jerome Hughes N. Date 1-19-2018

RULE 26.7(A): Identified Tracts? Y Affected Persons: EOG-Y, Tactical N. Date 1-19-2018

Order Conditions: **Issues:** Swab test

Additonal COAs: _____