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iamesbruc@aol.com

June 9, 2009

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

Dear Florene:

Enclosed for filing, on behalf of Nacogdoches Oil and Gas Inc., are an original and one copy of an application for approval of a water disposal well, together with a proposed advertisement. The advertisement was previously e-mailed to the Division. Please set this matter for the July 9, 2009 Examiner hearing. Thank you.

Very truly yours,

lames Bruce

Attorney for Nacogdoches Oil and Gas, Inc.

RECEIVED

2009 JUN 9 PM 1 03

Case 14337

PROPOSED ADVERTISEMENT

Case No. 14337: Application of Nacogdoches Oil and Gas, Inc. for approval of a water disposal well, Eddy County, New Mexico. Applicant seeks an order approving water disposal into the Entrada formation in the South Hospah Unit Well No. 9, located 330 feet from the north line and 2051 feet from the east line of Section 12, Township 17 North, Range 9 West, NMPM. The well is located approximately 30 miles northeast of Thoreau, New Mexico.

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF NACOGDOCHES OIL AND GAS, INC. FOR APPROVAL OF A WATER DISPOSAL WELL, MCKINLEY COUNTY, NEW MEXICO.

Case No. _ /4337

APPLICATION

Nacogdoches Oil and Gas, Inc. applies for an order approving a water disposal well, and in support thereof, states:

- 1. Nacogdoches Oil and Gas, Inc. proposes to convert to disposal the South Hospah Unit Well No. 9, located 330 feet from the north line and 2051 feet from the east line of Section 12, Township 17 North, Range 9 West, N.M.P.M., McKinley County, New Mexico.
- 2. A Form C-108 for the South Hospah Unit Well No. 9, to be re-named the South Hospah SWD Well No. 9, is attached hereto as Exhibit 1. Injection will be into the Entrada formation at a depth of 3794-3854 feet subsurface.
 - 3. The granting of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving the application.

Respectfully submitted,

Janhes Bruce

Post Office Box 1056

Santa Fe, New Mexico 87504

(505) 982-2043

Nacogdoches Oil and Gas, Inc.

SUSPENSE .	ENGINEER	LOGGED IN	TYPE	- "-	APP NO.

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

ABOVE THIS LINE FOR DIVISIONLESS ONLY

	(αs)	Le 143.
	administrative application checklist	
	THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REG WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE	ULATIONS
Appli	cation 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] [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD Nacogdoches' South Hospah 9 30-031-20013	
	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	T
[2]	NOTIFICATION REQUIRED TO: - Check Those Which Apply, or _ Does Not Apply Working, Royalty or Overriding Royalty Interest Owners Offset Operators, Leaseholders or Surface Owner	EXHIBIT
	Application is One Which Requires Published Legal Notice	ΪŢ
	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office	
•	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.
- CERTIFICATION: I hereby certify that the information submitted with this application for administrative 4 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.

rint or	Type	Name
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BRIAN WOOD (505) 466-8120 FAX 466-9682 Signature

Title

Date

CONSULTANT

6-1-09

e-mail Address

brian@permitswest.com

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: Secondary Recovery Pressure Maintenance YES Disposal Storage Application qualifies for administrative approval? Yes XXX No (needs aquifer exemption)
II.	OPERATOR: NACOGDOCHES OIL & GAS, INC.
	ADDRESS: P.O. BOX 632418, NACOGDOCHES, TX 75963 Case 14337
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: (505) 466-8120
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project?Yes _XXX No If yes, give the Division order number authorizing the project:
V.	Attach a map 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.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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.	Attach appropriate geologic data on the injection zone 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.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
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: BRIAN WOOD TITLE: CONSULTANT
	SIGNATURE: DATE: JUNE 1, 2009
*	E-MAIL ADDRESS: <u>brian@permitswest.com</u> 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:

III. WELL DATA

- 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

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.

INJECTION WELL DATA SHEET

OPERATOR: NACOGDOCHES & GAS, INC.

WELL NAME & NUMBER: SOUTH HOSPAH SWD #9

WELL LOCATION:

330' FNL & 2051' FEL FOOTAGE LOCATION

UNIT LETTER

<u>12</u> SECTION 17 N TOWNSHIP

WELL CONSTRUCTION DATA

<u>9 W</u> RANGE

WELLBORE SCHEMATIC

% TOC 3301

Will run 4-1/2" 10,5# Tiner from surface to 3770

Hospah perforated 1630' - 1652'

Morrison perforated 2915',

3793' & 3803' in 1967.

Entrada perforated

2990', 3047', 3100', & 3180'

and (?) 3800' - 3829' in 1968

Entrada will be perforated 3794' - 3854

will set 2-7/8" 4.7# tubing at 3740"

will cement liner to surface with 496 outs

set at 86' & cemented

to surface with 90 sx

will set Baker Tension packer at 3740' Hole Size: 15"

Casing Size: 10-3/4" 32.75#

Cemented with: 90 sacks

or _____fi

Top of Cement: SURFACE

Method Determine: VISUAL

Proposed Liner

Surface Casing-

Hole Size: <u>≤7"</u>

Liner Size: <u>4-1/2" 10.5# LS ST&C</u>

Cemented with: 287 sacks

or 496 ft³

Top of Cement: SURFACE

Method Determined: VISUAL

Production Casing

Hole Size: <u>8-3/4"</u>

Casing Size: 7" 20# & 23# J-55 & N-80

Cemented with:

sacks

or <u>670</u> ft³

Top of Cement: 330'

Method Determine: CBL

Total Depth: 3,945'

7" 20# & 23#
set at 3933' & cemented

-to-500° with-670 cu ft-

TD = 3945'

Injection Interval

From 3,794 feet To 3,854 feet

(Perforated or Open Hole; indicate which)

<u>INJECTION WELL DATA SHEET</u>

Tubing Size: <u>2-7/8" 4.7#</u>	Lining Material: <u>UNLINED</u>
Type of Packer: BAKER TENSIION OR ITS EQUIVALENT	
Packer Setting Depth: 3,740' (WITHIN 54' OF THE HIGHES	ST PERFORATION)
Other Type of Tubing/Casing Seal (if applicable):	
Additional Data	
1. Is this a new well drilled for injection? Yes _XX	<u>X</u> No
If no, for what purpose was the well originally drilled? W	<u>'ELL WAS PLANNED IN 1967 AS A HOSPAH OIL WELL</u>
A YEAR LATER (1968) A SUNDRY NOTICE WAS FI	LED TO USE THE ENTRADA AS A WATER SOURCE
2. Name of the Injection Formation: <u>ENTRADA</u>	
3. Name of Field or Pool (if applicable): <u>SWD; ENTRADA</u>	(POOL CODE: 96436)
4. Has the well ever been perforated in any other zone(s)? Intervals and give plugging detail, i.e. sacks of cement or	
HOSPAH: 1630' - 1652'; MORRISON: 2915', 2990', 3 WILL RUN LINER FROM SURFACE TO 3770' AND 6	3047', 3100, & 3180'; & ENTRADA; 3793' & 3800' - 3829 CEMENT TO SURFACE
5. Give the name and depths of any oil or gas zones underly injection zone in this area:	
OVER: HOSPAH (1562' – 1625') & DAKOTA (2485' –	<u>- 2660')</u>
<u>UNDER: NONE</u>	

I. Purpose is water disposal into the Entrada zone.

II. Operator: Nacogdoches Oil and Gas, Inc. Operator phone number: (936) 560-4747 Operator address: P. O. Drawer 632418

Nacogdoches, TX 75963

Contact: Brian Wood (Permits West, Inc.)

Phone: (505) 466-8120

III. A. (1) Lease: BLM lease NMNM-012335

Lease Size: 344.08 acres

Lease Area: W2NE4, NW4, Lots 1-4; T. 17 N., R. 9 W.

Closest Lease Line: 330'

Well Name & Number: South Hospah SWD #9* (API 30-031-20013)

*currently South Hospah Unit 9,

a shut-in Hospah Lower Sand, South oil well

Location: 330' FNL and 2051' FEL Sec. 12, T. 17 N., R. 9 W.

(see Exhibit A)

A. (2) Surface casing (10-3/4", 32.75#) was set in 1967 at 86' in a 15" hole. Surface casing was cemented with 90 sacks of an unknown type of cement. Sundry Notice dated 4-5-67 indicates cement circulated to the surface.

Well was drilled to a TD of 3,945'. Production casing (7", 20# & 23#, J-55 & N-80) was set at 3,933' in an 8-3/4" hole. Cemented with 670 cubic feet (type cement unknown) to 330' based on CBL run on May 28, 2009. Well was initially perforated with 2 holes at 1,645' in the South Hospah Lower Sand.

A 4.5" 10.5# LS ST&C liner will be run from the surface to 3,770' to cover Hospah and Morrison formation perforations. Liner will be cemented to the surface. Lead will be 137 sacks premium light + 8% bentonite + 1% CaCl₂ + 5% LCM mixed at 12.1 pounds per



gallon and 2.09 cubic feet per sack. Tail will be 150 sacks Type III cement + 2% CaCl₂ mixed at 14.5 pounds per gallon and 1.40 cubic feet per sack.

- A. (3) Tubing will be 2-7/8" 4.7# unlined. It will be set at 3,740' (54' above the highest perforation at 3794').
- A. (4) A Baker Tension packer will be set at 3,740' (which will be 54' above the highest perforation (3,794').
- B. (1) Disposal zone will be the Entrada sandstone (pool code 96436).
- **B.** (2) Disposal interval will be 3794' to 3854'. It will be perforated (3/8" diameter) with four shots per foot.
- **B. (3)** Well was drilled by Tenneco in 1967 to 3,945'. It was tested in both the Morrison and Entrada. Salt water was recovered from both zones. It was subsequently and repeatedly completed as a Hospah Lower Sand, South oil well (pool code 33070). Well perforation history is:

April 3, 1967 by Tenneco

perforated Morrison @ 3180', 3100', 3047' 2990', & 2915' with 2 spf perforated Entrada at 3793' & 3803' with 2 spf set 7" packer at 3,291'

set cement retainer @ 2,890' & cemented with 170 sacks perforated South Hospah Lower Sand @ 1,645' with 2 spf

January 17, 1968 by Tenneco

Sundry Notice of Intent filed squeeze perforations at 1645' drill out to 3830'

perforate Entrada 3800' - 3829' as water supply well for secondary recovery There is no indication in state records that work was actually performed. However, TOC was later found at 3710'.

March 15, 1968 by Tenneco perforated Lower Hospah 1630' - 1644'



May 26, 1978 by Tenneco perforated Lower Hospah 1630' - 1652'

<u>May 12, 2009 by Nacogdoches</u> perforated Entrada 3790' - 3816', 3819' - 3831', 3838' - 3840', & 3844' - 3854'

Well will be for Nacogdoches' exclusive use and for the sole purpose of water disposal from present and future Nacogdoches wells. Water analysis from a Hospah South well is attached.

B. (4) Well bore has been perforated in the following three zones. All perforations are currently open, though the Entrada perforations are squeezed with gel. The Hospah and Morrison perforations will be covered with a cemented liner from the surface to 3,770'.

Hospah: 1630' - 1652'

Morrison: 2915', 2990', 3047', 3100, & 3180'

Entrada: 3790' - 3816', 3819' - 3831', 3838' - 3840', & 3844' - 3854'

B. (5) Top of the Entrada is at 3790'. Bottom of the Entrada is at 3930'. Proposed disposal interval will 3794' - 3854'

Bottom of the closest potentially productive zone (Morrison) is at 2765'. There will be a 1029' interval between the bottom of the Morrison and the highest Entrada injection perforation.

Bottom of the closest actual productive zone (Dakota) is at 2660'. There will be a 1134' interval between the bottom of the Morrison and the highest Entrada injection perforation.

There is no underlying producing zone. Oil is being produced elsewhere in the San Juan Basin from the Entrada. However, closest historic Entrada production is in the now plugged and abandoned Snake Eyes Field which is ≈ 21 miles north (20-21n-8w).

IV. This is not an expansion of an existing injection project. There is a water flood in the Hospah Field. However, all producing wells benefitting from that water flood are Hospah oil wells. This will be purely an Entrada disposal well.



V. A map (Exhibit B) showing the 85 existing wells within the half mile radius area of review is attached. (An 86th well is 12' beyond the 1/2 mile radius and is also included.) None of the wells penetrated the Entrada. Deepest (2827') of the wells (Nacogdoches' South Hospah Unit 10 (API 30-031-60017)) is 967' above the highest proposed perforation and 1485' west. All of the remaining wells were Mancos, Hospah Upper Sand, South (HUSS), or Hospah Lower Sand, South (HLSS). A tabulation of the wells within a half mile radius follows.

<u>OPERATOR</u>	WELL.	API 30-031	LOCATION	ZONE.	STATUS	TVD	DISTANCE
Nacogdoches	SHU 29	-20120	NWNE 12-17n-9w	HLSS	OW	1625'	197'
Nacogdoches	SHU 62	-20545	NWNE 12-17n-9w	HLSS	OW	1710'	425'
Citation	SHU 41	-20154	NENE 12-17n-9w	HUSS & HLSS	P&A	1637'	516'
Nacogdoches	SHU 25	-20092	NENE 12-17n-9w	HLSS	OW	1702'	546'
Nacogdoches	SHU 49	-20363	NWNE 12-17n-9w	HLSS	OW	1639'	558'
Nacogdoches	SHU 24	-20091	NWNE 12-17n-9w	HLSS	OW	1711'	599'
Nacogdoches	SHU 30	-20121	NWNE 12-17n-9w	HUSS & HLSS	OW	1622'	624'
Nacogdoches	SFRR A 73	-20019	SWSE 1-17n-9w	HLSS	OW	1665'	661'
Nacogdoches	SFRR A 97	-20855	SWSE 1-17n-9w	HLSS	WIW	1690'	696'
Nacogdoches	SFRR A 79	-20099	SWSE 1-17n-9w	HLSS	OW	1665'	705'
Nacogdoches	SHU 31	-20122	NWNE 12-17n-9w	HLSS	OW	1651'	749'
Nacogdoches	SFRR A 89	-20442	SWSE 1-17n-9w	HLSS	OW	1769'	771'
Nacogdoches	SHU 36	-20118	NWNE 12-17n-9w	HLSS	WIW	1635'	812'
Nacogdoches	SHU 63	-20544	NENE 12-17n-9w	HLSS	WIW	1695'	819'
Nacogdoches	SHU 28	-20095	NENE 12-17n-9w	HUSS	OW	1675'	827'
Nacogdoches	SFRR A 81	-20134	SWSE 1-17n-9w	HLSS `	OW	1655'	880'
Nacogdoches	SFRR A 84	-20372	SWSE 1-17n-9w	HLSS	WIW	1656'	912'
Nacogdoches	SHU 61	-20546	NWNE 12-17n-9w	HLSS	OW	1715'	913'
Nacogdoches	SHU 5	-05146	NWNE 12-17n-9w	HUSS	WIW	1645'	934'
Nacogdoches	SFRR A 72	-05570	SESE 1-17n-9w	HLSS	OW	1631'	1037'
Nacogdoches	SFRR A 96	-20800	SWSE 1-17n-9w	HLSS	OW	1682'	1077'
Citation	SHU 56	-20300	NENE 12-17n-9w	HUSS & HLSS	P&A	1602'	1093'
Nacogdoches	SFRR A 91	-20714	SESE 1-17n-9w	HUSS	OW	1682'	1109'
Nacogdoches	SHU 35	-20119	NENE 12-17n-9w	HLSS	OW	1596'	1201'
Nacogdoches	SFRR A 80	-20133	SESE 1-17n-9w	HLSS	OW	1635'	1212'
Nacogdoches	SFRR A 94	-20772	SESE 1-17n-9w	HLSS	OW	1700'	1245'
Nacogdoches	SHU 32	-20125	NENW 12-17n-9w	HUSS & HLSS	OW	1647'	1279'
Tenneco	SHU 65	-20614	SWNE 12-17n-9w	HLSS	P&A	1715'	1303'
Nacogdoches	SHU 50	-20364	NENE 12-17n-9w	HLSS	OW	1601'	1307'
Nacogdoches	SHU 8	-20015	SWNE 12-17n-9w	HLSS '	OW	1709'	1320'
Tenneco	Hospah C H 1	-20776	SWNE 12-17n - 9w	HLSS	P&A	1719'	1326'
Tenneco	Hospah C H 2		SWNE 12-17n-9w	HLSS	P&A	1742'	1354'
Tenneco	SHU 67	-20616	SWNE 12-17n-9w	HLSS	P&A	1715'	1374'
Nacogdoches	SHU 48	-20362	SWNE 12-17n-9w	HUSS	OW	1635'	1385'



OPERATOR WELL API 30-031 LOCATION ZONE STATUS TVD DISTANCE Nacogdoches SHU 38 -20151 NENE 12-17n-9w HLSS OW 1595' 1429' Nacogdoches SFRR A 77 -20100 SESE 1-17n-9w HUSS & HLSS OW 1567' 1449' Tenneco SHU 66 -20615 SWNE 12-17n-9w HUSS P&A 1715' 1453' Nacogdoches SHU 3 -05140 SENE 12-17n-9w HLSS OW 1603' 1475' Nacogdoches SHU 4 -05145 NENW 12-17n-9w HLSS OW 1640' 1475' Tesoro SFRR A 92 -20715 SESE 1-17n-9w HLSS DK OW 2827' 1485' BC&D SHU 18 -20058 SWNE 12-17n-9w HLSS DK OW 2827' 1485' Nacogdoches SFRR A 76 -20073 SESE 1-17n-9w HLSS OW 1685' 1544' Nacogdoches SHU 1
Nacogdoches SFRR A 77 -20100 SESE 1-17n-9w HUSS & HLSS OW 1567' 1449' Tenneco SHU 66 -20615 SWNE 12-17n-9w HUSS P&A 1715' 1453' Nacogdoches SHU 3 -05140 SENE 12-17n-9w HLSS OW 1603' 1475' Nacogdoches SHU 4 -05145 NENW 12-17n-9w HLSS OW 1640' 1475' Tesoro SFRR A 92 -20715 SESE 1-17n-9w HLSS DK 1864' 1477' Nacogdoches SHU 10 -60017 NENW 12-17n-9w HLSS DK OW 2827' 1485' BC&D SHU 18 -20058 SWNE 12-17n-9w HLSS DK OW 2827' 1485' Nacogdoches SHU 64 -20547 SENE 12-17n-9w HLSS OW 1685' 1544' Nacogdoches SFRR A 76 -20073 SESE 1-17n-9w HUSS P&A 1583' 1606' Whigham CTV Hospah 1
Tenneco SHU 66 -20615 SWNE 12-17n-9w HUSS P&A 1715' 1453' Nacogdoches SHU 3 -05140 SENE 12-17n-9w HLSS OW 1603' 1475' Nacogdoches SHU 4 -05145 NENW 12-17n-9w HUSS OW 1640' 1475' Tesoro SFRR A 92 -20715 SESE 1-17n-9w HLSS DK OW 2827' 1485' Nacogdoches SHU 10 -60017 NENW 12-17n-9w HLSS DK OW 2827' 1485' BC&D SHU 18 -20058 SWNE 12-17n-9w HUSS P&A 1750' 1522' Nacogdoches SHU 64 -20547 SENE 12-17n-9w HLSS OW 1685' 1544' Nacogdoches SFRR A 76 -20073 SESE 1-17n-9w HUSS P&A 1583' 1606' Whigham CTV Hospah 1 -05143 SWNE 12-17n-9w HUSS OW 1565' 1651' Nacogdoches SHU 1
Nacogdoches SHU 3 -05140 SENE 12-17n-9w HLSS OW 1603' 1475' Nacogdoches SHU 4 -05145 NENW 12-17n-9w HUSS OW 1640' 1475' Tesoro SFRR A 92 -20715 SESE 1-17n-9w HLSS P&A 1864' 1477' Nacogdoches SHU 10 -60017 NENW 12-17n-9w HLSS DK OW 2827' 1485' BC&D SHU 18 -20058 SWNE 12-17n-9w HUSS P&A 1750' 1522' Nacogdoches SHU 64 -20547 SENE 12-17n-9w HLSS OW 1685' 1544' Nacogdoches SFRR A 76 -20073 SESE 1-17n-9w HUSS OW 1591' 1575' Citation SHU 55 -20299 SENE 12-17n-9w HUSS P&A 1583' 1606' Whigham CTV Hospah 1 -05143 SWNE 12-17n-9w HUSS OW 1565' 1651' Nacogdoches SFRR A 82 -20137
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Nacoadoches SHLL11 -20016 SENW 12-17n-9w HLSS OW 1774' 1866'
Nacogdoches SFRR A 88 -20440 SESE 1-17n-9w HLSS OW 1670' 1870'
Nacogdoches SHU 47 -20361 NENW 12-17n-9w HLSS OW 1780' 1909'
Nacogdoches SHU 16 -20056 SENW 12-17n-9w HUSS OW 1710' 1942'
Nacogdoches SFRR A 93 -20716 SESE 1-17n-9w HUSS OW 1620' 1946'
Tesoro SFRR 57 -20103 NWSE 1-17n-8w undesignated DK P&A 2800' 1969'
Nacogdoches SHU 60 -20411 SENE 12-17n-9w HLSS WIW 1648' 2024'
Nacogdoches SFRR A 87 -20413 SESE 1-17n-9w HLSS WIW 1598' 2028'
Nacogdoches SHU 59 -20410 SWNE 12-17n-9w HUSS & HLSS WIW 1657' 2059'
Petroleum SF 46 -05155 SESW 1-17n-9w undesignated P&A 1685' 2087'
BC&D SHU.19 -05137 NWSE 12-17n-9w HUSS P&A 1638' 2087'
Tesoro Hanson 18 -20156 SWSW 6-17n-8w HLSS P&A 1566' 2097'
Nacogdoches SHU 27 -20094 SENE 12-17n-9w HUSS OW 1669' 2121'
Citation SHU 40 -20161 SENE 12-17n-9w HUSS P&A 1637' 2128'
Nacogdoches SHU 17 -20057 SWNE 12-17n-9w HUSS WIW 1787' 2141'
Nacogdoches SHU 7 -20012 SENE 12-17n-9w HLSS OW 1750' 2168'
Nacogdoches SHU 33 -20124 SENW 12-17n-9w HLSS WIW 1660' 2169'
Nacogdoches SFRR A 90 -20441 SESE 1-17n-9w HLSS OW 1670' 2175'
Nacogdoches SHU 54 -20407 NENE 12-17n-9w HLSS WIW 1624' 2272'
Tesoro SFRR 22 -20146 NWNW 7-17n-8w HLSS P&A 1576' 2288'
Nacogdoches SHU 2 -05139 SENW 12-17n-9w HUSS OW 1637' 2379'
Nacogdoches SFRR 21 -20032 NWNW 7-17n-8w HLSS OW 1585' 2381'
Nacogdoches SFRR 39 -20452 NWNW 7-17n-8w HLSS OW 1650' 2410'
Nacogdoches SFRR A 95 -20746 NESE 1-17n-9w HLSS OW 1640' 2427'
Citation Hospah 34 -20123 SENW 12-17n-9w HLSS P&A 1661' 2438'



OPERATOR	<u>WELL</u>	API 30-031	LOCATION	ZONE	<u>STATUS</u>	<u>TVD</u>	<u>DISTANCE</u>
Nacogdoches	SFRR 13	-20038	NWNW 7-17n-8w	HLSS	OW	1606'	2455'
Mt. States	Hanson 8	-20044	SWSW 6-17n-8w	HLSS	TA OW	1579'	2471'
Nacogdoches	SHU 37X	-20135	NWNW 12-17n-9w	HLSS	OW	1666'	2534'
Nacogdoches	SHU 39	-20152	SENE 12-17n-9w	HLSS	WIW	1687'	2536'
Mt. States	Hanson 41	-20850	SWSW 6-17n-8w	HLSS	TA OW	1640'	2579'
Nacogdoches	\$FRR A 74	-20021	NESE 1-17n-9w	HLSS	OW	1592'	2623'
Nacogdoches	SFRR A 83	-20147	NESE 1-17n-9w	HUSS	WIW	1557'	2630'
Nacogdoches	HSU 9	-05176	NWSE 1-17n-8w	HUSS	OW	1570'	2652'

A map (Exhibit C) showing all 339 wells (162 oil or gas producers + 31 water injection wells + 143 P & A + 2 water supply) within a two mile radius is attached.

Exhibit D shows all leases within a half mile radius. Details are:

AREA (all T. 17 N.)	<u>LESSOR</u>	<u>LEASE</u>	LEASEHOLD OPERATOR
N2 12-17n-9w	BLM	NM-12335	·Nacogdoches
N2S2 12-17n-9w	BLM	NM-17543	Nacogdoches
S2 1-17n-9w	fee	HSU & SFRR A	Nacogdoches
SW4 6-17n-8w	FIMO	pending	Nacogdoches
NW4 7-17n-8w	fee	SFRR	Nacogdoches

A map (Exhibit E) showing all lessors within a two mile radius is attached. Leases are BLM, fee, Navajo allotted (FIMO), or State (NMSLO).

- VI. None of the wells within a 1/2 mile radius penetrated the proposed injection zone. The deepest well (Nacogdoches' South Hospah Unit 10) within a half mile radius has a total depth of 2827'. There will be a 967' interval between the bottom of that well (which is in the Morrison) and the highest proposed perforation (3794').
- VII. 1. Average injection rate will be ≈15,000 bwpd.

 Maximum injection rate will be ≈20,000 bwpd.
 - 2. System will be closed. All needed infrastructure is in place. No additional facilities will be needed.



- 3. Average injection pressure will be ≈750 psi Initial maximum injection pressure will be ≈758 psi (≤0.2 psi x 3794' depth of top perforation = 758.8 psi) Nacogdoches will conduct a step rate test to raise the maximum if justified by test and approved by government agencies.
- 4. Water source will be existing and future Nacogdoches wells in the San Juan Basin. Nacogdoches has 183 existing wells in the basin. Analyses of Entrada water from the South Hospah 9 (receiving or target water) and Hospah sand (produced or source water to be disposed) are attached (Exhibit F). An April 19, 1967 Sundry Notice stated that Tenneco "rec salt wtr" from the Entrada. A summary follows.

<u>Parameter</u>	Entrada run 1	Entrada run 2	<u> </u>	SDWA*
Hq	7.65	7.63	8.97	6.5 - 8.5
resistivity	_. 3.2	3.0		
specific gravity	1.011	1.011	1.001	
•	(all mg/l)	(all mg/l)	(all mg/l)	(all mg/l)
barium	0	0	0	1.0
bicarbonate	85	98	720	
calcium	441	441	14	
carbonate	<1 ·	<1		
chloride	400	600	410	250
hydroxide	0	0		
iron	0	0	8.25	0.3
magnesium	<0.5	<0.5	18.23	
potassium	3	5		
sodium	691	680	738	
sulfate	1900	1600	525	250
total dissolved solids	3517	3419	2434	500
total hardness CaCO3	1102	1102	110	

^{*} Safe Drinking Water Act

5. The Entrada has not been found to be productive within two miles of the well. Closest current Entrada production is ≈ 26 miles east-northeast in 8-19n-4w at the Eagle Springs Field. In general, Entrada water near recharge zones (basin fringe) has a specific conductance of <1,500 μ mhos. Entrada water from deeper parts of



the basin has a specific conductance of >10,000 μ mhos. Stone et al in <u>Hydrogeology and water resources of San Juan Basin</u>, <u>New Mexico</u> wrote, "Generally, however, water from the Entrada is not suitable for drinking, especially in deeper parts of the basin." There are 31 active water disposal wells in the Entrada in the San Juan Basin. Closest active water disposal well in the Entrada is \approx 24 miles northeast in 28-21n-6w.

VIII. The Entrada sandstone is a very porous and permeable æolian sandstone. It produces or produced oil elsewhere in the basin (Eagle Mesa, Leggs, Media, Ojo Encino, Papers Wash, Snake Eyes Fields). It is ≈140' thick in this well bore.

Formation tops in this well are:

Menefee Shale: 0'
Point Lookout Sandstone: 313'
Mancos Shale: 535'
Hospah Sandstone: 1562'
Gallup Sandstone: 1625'

Dakota Sandstone: 2485'
Morrison Formation: 2718'
Todilto Limestone: 3733'
Entrada Sandstone: 3790'
Total Depth: 3945'

There are two water wells within a one mile radius. Closest water well is 9/10 mile northwest in NESE 2-17n-9w. It is 585' deep and the likely aquifer is the Point Lookout.

No existing underground drinking water source is below the Entrada within a two miles. There will be 3205' of vertical separation between the bottom of the deepest (585') water well within two miles and the top of the Entrada (3790').



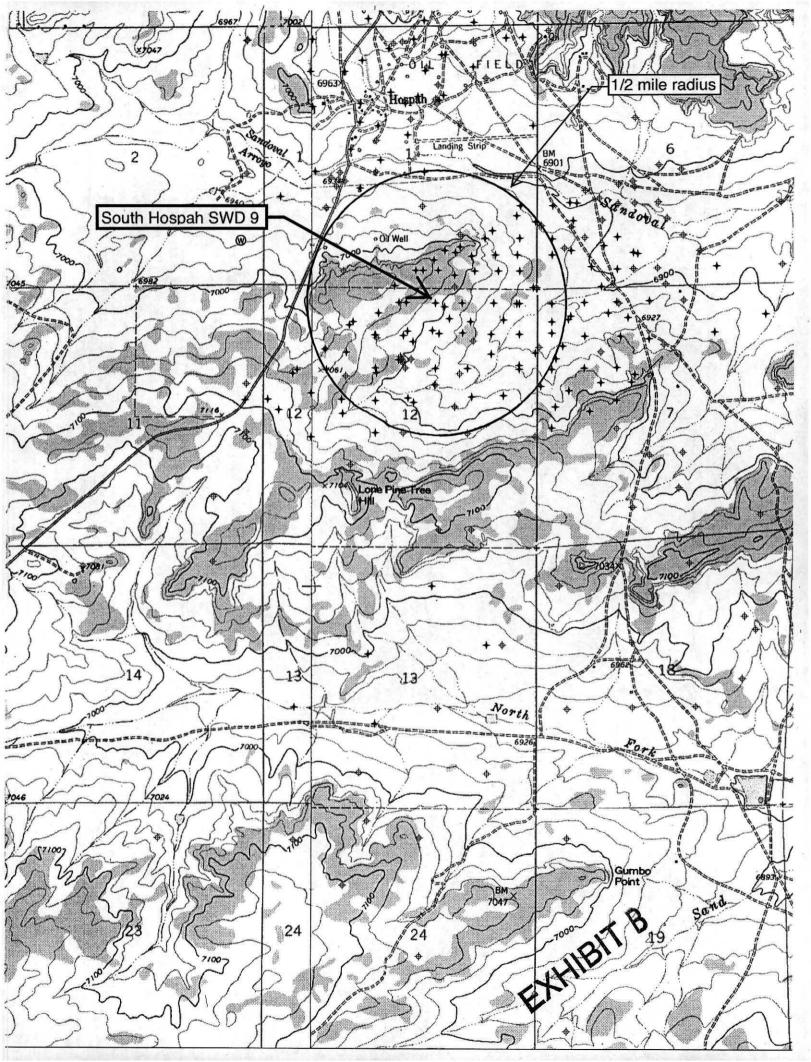
- IX. The well will be stimulated with 15% HCl.
- X. Three Schlumberger logs are on file with OCD: Dual Induction-Laterolog, Sonic log Gamma Ray, and Compensated Formation Density. All were run at the time of the well's original drilling on behalf of Tenneco. (An exhibit in Citation's Order PMX-154-0 dated 11-16-89 (for well 30-031-20544) indicates a CBL was run at some point in time in the South Hospah 9.) Nacogdoches ran a CBL on May 28, 2009.
- XI. There is one water well within a one mile radius. It is 9/10 mile northwest and is 585' deep. An analysis from it is attached as Exhibit G.
- XII. Nacogdoches is not aware of any geologic or engineering data which may indicate the Entrada is in hydrologic connection with any underground sources of water. There will be 3205' of vertical separation between the top (3790') of the Entrada and the bottom (585') of the deepest water well within two miles. This interval includes at least one shale zones (Mancos).
- XIII. Notice (this application) will be sent (Exhibit H) to the surface owner (BLM), operators of all wells (only Nacogdoches), and all Entrada leasehold operators (only Nacogdoches) within a half mile. Legal ad (Exhibit I) was published on May 8, 2009. In addition, notice has been sent to the lessor (FIMO) of the pending lease in 6-17n-8w. Nacogdoches has the exclusive right to negotiate with the allottees in Section 6, has signed the required minimum amount of allotted interests, and has filed its lease wide environmental assessment (EA) with FIMO. Upon approval of the EA, the lease will be issued to Nacogdoches.

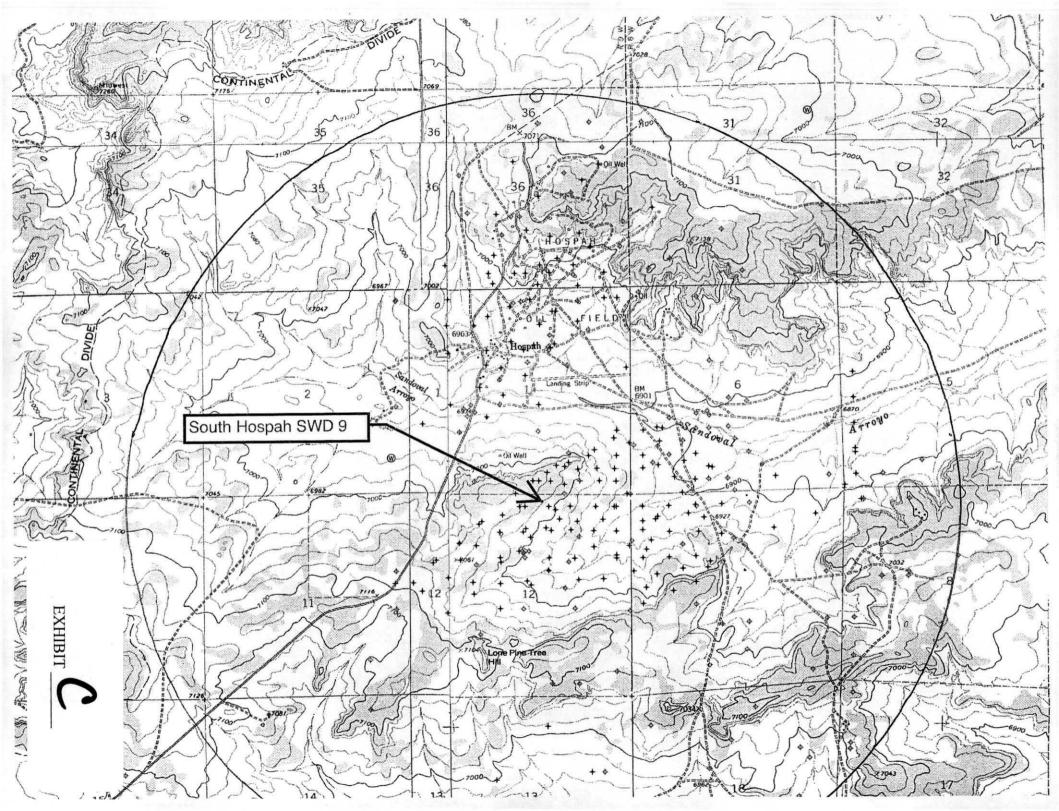


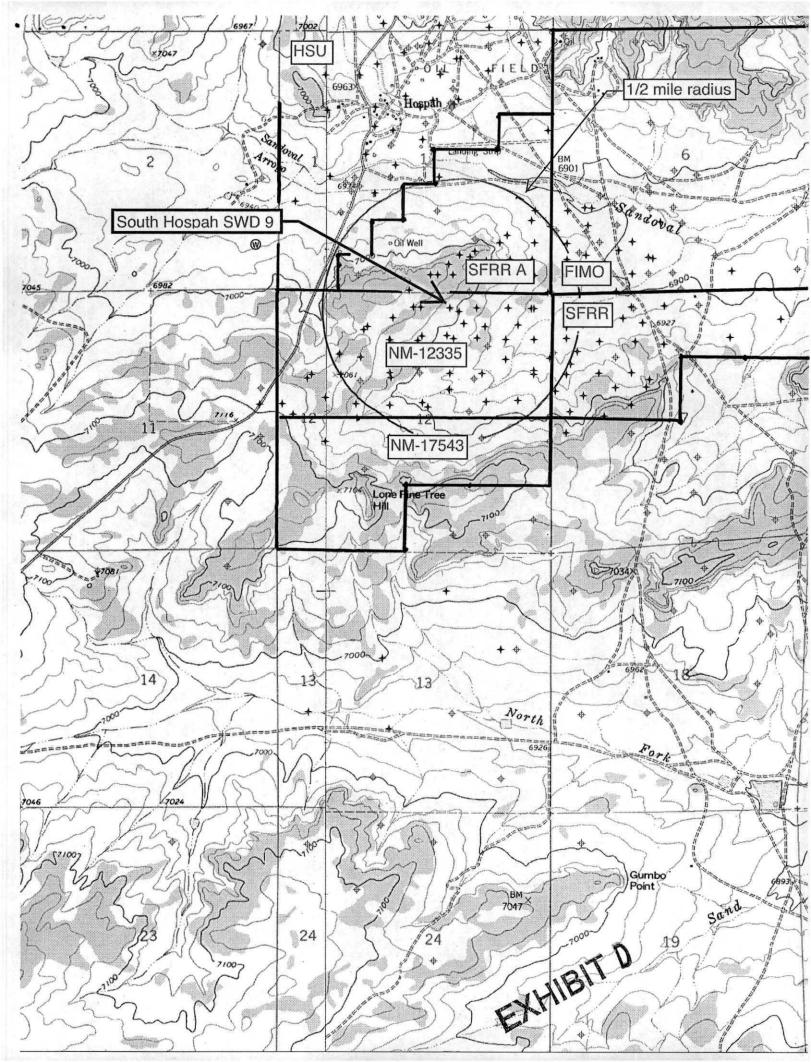
NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACERAGE DEDICATION PLAT

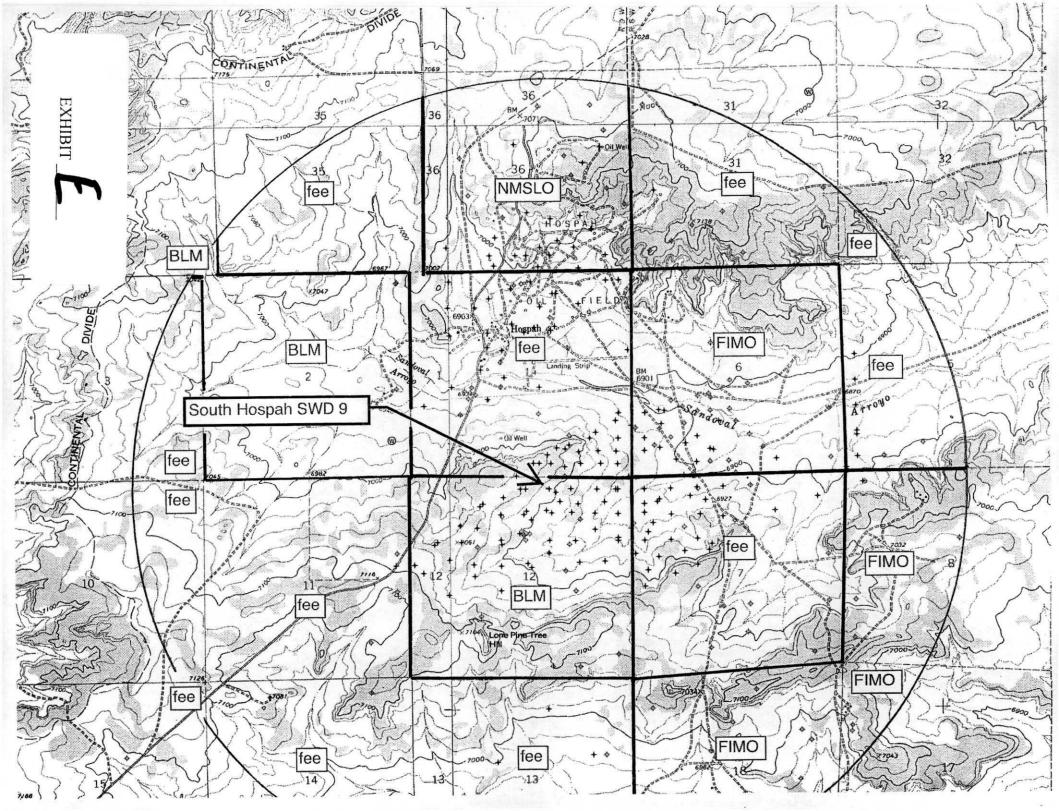
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TENNECO	OIL COMPAN		HOSPAH		9
Unit Letter B	Section 1.2	Township 17 North	Ronge 9 West	County McKinley	
	Location of Well:		17 11830	MCKINICY	
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		Hospah Lower Sand			
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2. If more interest and		is dedicated to the well,	outline each and ider	ntify the ownership th	nereof (both as to working
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() Yes	() No	If answer is "yes," type	of consolidation		
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Pooling or c	e will be assigni atherwise) or un	ed to the well until all inter itil a non standard unit, eli	ests have been conso	looted (by communit	ization, unitization, forced-
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Ernst Engineering Co. Durango. Colorado











BJ SERVICES Farmington District Lab Water Analysis Report

Test # #9

Customer/Well Information

Company:

ANGELINA WELL

Well Name:

SOUTH HOSPAH#9

Location:

Depth:

00-000-00000

State: Formation: San Juan County, NM **ENTRADA SAND ZONE**

Date:

5/14/09

Prepared for:

Water Type:

ALLEN EAKER

Submitted by: Prepared by:

ALLEN EAKER **RON VALDEZ**

PRODUCED

Background Information

Reason for Testing:

Completion type:

Well History: Comments:

routine

RUN#1

Sample Characteristics

Sample Temp:

63 (°F)

Viscosity:

1cP

7.63

Color: Odor:

GREY **HYDROCARBON**

Specific Gravity: S.G. (Corrected): 1.010

1.011 @ 60 °F

Turbidity:

NONE

Resistivity (Meas.):

3.00 Ω-m

Filtrates:

SLIGHT

EXHIBITE

Sample Composition

CATIONS

	mg/l	me/I	ppm
Sodium (calc.)	680	29.6	673
Calcium	441	22.0	437
Magnesium	< .5		
Barium	0	0.0	0
Potassium	5	0.1	5
Iron	0.00	0.0	0.00

ANIONS

Chloride	600	16.9	594
Sulfate	1600	33.3	1584
Hydroxide	0	0.0	0
Carbonate	< 1		
Bicarbonate	98	1.6	97

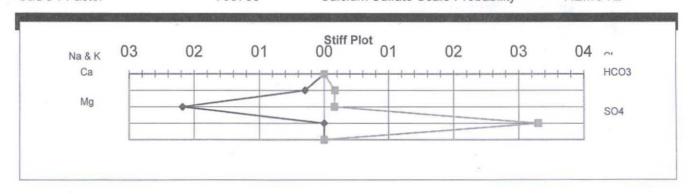
SUMMARY

Total Dissolved Solids(calc.)	3419		3385
Total Hardness as CaCO3	1102	22.0	1091

Scaling Tendencies

CaCO3 Factor CaSO4 Factor

43051.36 705760 Calcium Carbonate Scale Probability --> REMOTE Calcium Sulfate Scale Probability ----> REMOTE





BJ SERVICES Farmington District Lab

Water Analysis Report

Customer/Well Information

Company: Well Name: ANGELINA WELL

SOUTH HOSPAH#9

Location:

00-000-00000

State: Formation: San Juan County, NM **ENTRADA SAND ZONE**

Depth:

Date:

Prepared for:

Submitted by:

Prepared by: Water Type:

ALLEN EAKER **RON VALDEZ**

ALLEN EAKER

5/14/09

Test # #9

PRODUCED

Background Information

Reason for Testing:

Completion type: Well History:

Comments:

routine

run#2

Sample Characteristics

Sample Temp:

63 (°F)

7.65

Viscosity: Color:

1cP

pH: Specific Gravity:

1.010

Odor:

GREY **HYDROCARBON**

S.G. (Corrected):

1.011 @ 60 °F

Turbidity:

NONE

Resistivity (Meas.):

3.20 Ω-m

Filtrates:

SLIGHT

Sample Composition

CATIONS

	mg/l	me/l	ppm
Sodium (calc.)	691	30.0	684
Calcium	441	22.0	437
Magnesium	< .5		
Barium	0	0.0	0
Potassium	3	0.1	3
Iron	0.00	0.0	0.00

ANIONS

Chloride	400	11.3	396
Sulfate	1900	39.6	1881
Hydroxide	0	0.0	0
Carbonate	< 1		
Bicarbonate	85	1.4	85

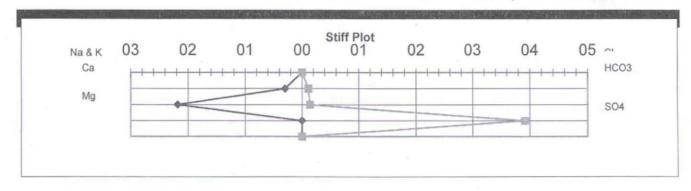
SUMMARY

Total Dissolved Solids(calc.)	3517		3482
Total Hardness as CaCO3	1102	22.0	1091

Scaling Tendencies

CaCO3 Factor CaSO4 Factor

37669.94 838090 Calcium Carbonate Scale Probability --> REMOTE Calcium Sulfate Scale Probability ----> REMOTE



EXHIBITE

Water Analysis Results

Log# Sample ID

Hospab Prod Water

Client Address

J. Environmental Services

Sampled: Depth: BHT:

Sept. 5, 2008 JUR Ву;

	mg/L	•		mg/L	meq/L	. MIL	LIEQU	VALENTS	
CO2 (dissolved)	100		Barium (Ba)	0.00	0.00	Cations *		Anions	·
O2 (dissolved)	ND		Calcium (Ca)	14,00	0.70	Ça	0.70	HCO3	11.80
H2S	69.75		Iron (Fe)	8.25	0.29	Mg	1,50	SO4	10.93
Suspended		``	Magnesium (Mg),	18,23	(.50	Na	32.10	CI	11.5
Solids (TSS)	84		Sodium (Na)-calc.	738.05	32.10	Ba	0.00	` <u> </u>	
Total Dissolved	•		Strontium (Sr)	nd	ba		ion Valu	es Dist. Water 20	C
Solids (TDS)	2434		Biembonate(HCO3)	720.00	11.80	CaCO3	, ,	13 mg/L	•
рН	8.97		Chloride (Cf)	410.00	.11.57	CaSO4 2	H20	2090 mg/L	
Sp. Gravity	1.0010		Sulfare (SO4)	525.00	10.93	BaSO4	•	2,4 mg/L	,
Oil in Water	ND					The scaling	indices	indicate the	
Probable Mineral Composition			Alkalinity (CaCO3)			tendency fo	r.the.sa	cepted water to	o (oraș
Compound	meq/L	mg/I_	Phenolphthalein	0.01	9	and the second		n of CaCO3 is	
BaSO4	0.00	0.00	Methyl Orange	720.00				ive: The form	
Ca(HCO3)2.	0.70	56.61	Hardness (CaCO3)					f the Sat. Com	:
CaSO4	0,00	0.00		. £10	, 8	**************************************		he probable	\$ ®
CaCl2	0.00	0.00	- Calcium -	35	1/ (mineral con	apositio	n for Ca604:	
Mg(HCO3)2	1.50	109.74	Calcium Carbons	ete Scaling Ir	dex	Calciur	n Sulfe	ite Scaling Ir	idex -
MgSO4	0.00	0.00	Temperature (F)	Scaling In	dex	Temperatu	re (F)	Sat, Conc. (r	ng/L)
MgCl2	0.00	0.00		Negativ	/e	70		#N/A	
NaHCO3	9,60	806.61	90	Negativ	/c	90		#N/A	
Na2SO4	10.93	776.69	. 110	Negativ	re .	110	;	#N/A	٠.
NaCl	11.57	676.15	140	Negatin	re :	140)	#N/A	
5 N. S. S.		······································	180	Negativ	/C	· 180		#N/A	,

Water Analysis Results

#080407 Log#

Sample ID Hospah Fresh Water

Client

J. Environmental Services

Depth: BHT: Sept. 5, 2008 JUR

·	mg/L	· · · · · ·		mg/L	meq/L	MJ	LLIEQUI	IVALENTS	
CO2 (dissolved)	66		Barium (Ba)	0.00	. 0.00	Cations		Anions	
O2 (dissolved)	ND	•	Calcium (Ca)	8.00	0.40	Сa	0.40	HCO3	7.57
H2S	, 0.085	-	Iron (Fe)	0.00	0,00	Mg	.0.30	S O 4	15,62
Suspended	•	.· ,	Magnesium (Mg)	3.65	0.30	Na	23.48	· CI	0.99
Solids (TSS)	. 8		Sodium (Na)-calc.	539,84	23.48	Ba	0.00		
Total Dissolved	•		Strontium (Sr)	nd	nd	Satur	ation Value	es Dist. Water .	20 C
Solids (TDS)	1798		Bicarbonate(HCO3)	462,00	7.57	CaCQ3		13 mg/I	,
pH	8.53		Chloride (Cl)	35.00	0.99	CaSO4	2H20	2090 mg/L	,
Sp. Gravity	1:0000		Sulfate (SO4)	750,00	15.62	BaSO4		2.4 mg/L	
Oil in Water ND			1	·		The sestin	g indices	indicate the	
Probable Minera	d Composition		Alkalinity (CaCO3)			tendency for the sampled water to form			
Compound	, meq/L	mg/L	Phenolphthalein	0.01		scale. The	formatio	n of CaCO3	is likely
BaSO4	0.00	0,00	Methyl Orange	462.00		if the inde	k is positi	ve. The for	nation
Ca(HCO3)2	0.40	32,35	Hardness (CaCO3)	*		of CaSO4	ís likely t	f the Sat. Co	nc.
CaSO4	0.00	0,00	Total	35		is less that	that of	he probable	
CaCl2	0.00	. 0,00	Calcium	20		mineral co	mpositio	n for C\$SO4	
Mg(HCO3)2	0.30	21.95	Calcium Carbona	ite Scaling Inc	dex	Calciu	ım Sulfa	ite Scaling	Index .
MgSO4	0.00	0.00	Temperature (F)	Scaling Inc	iex	Temperat	aire (F)	Sat. Conc.	(mg/L)
MgCl2	0,00	0.00	70	Negativi	e .	70)	. #N/	A -
NeHCO3	6.87	577.33	90	Negative	s	. 90		#N/	Α
Na2SO4	15,62	1109.56	110	Negativi	e	- 11	0	`#N/	Α
NaCl	0.99	57.72	140	Negative	c i	14	0 .	#N/	Α .
عد و سود			180	Negative	, 1	18	n.	#N/	Α

June 1, 2009

BLM 1235 LaPlata Highway Farmington, NM 87401

Nacogdoches Oil & Gas, Inc. is applying (see attached application) to convert its South Hospah 9 oil well to a water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: South Hospah SWD #9 Total Depth: 3,945'

Proposed Disposal Zone: Entrada (from 3,794' to 3,854') Location: 330' FNL & 2051' FEL Sec. 12, T. 17 N., R. 9 W.,

McKinley County, NM on BLM lease NMNM-012335

Approximate Location: ≈40 air miles north of Grants, NM

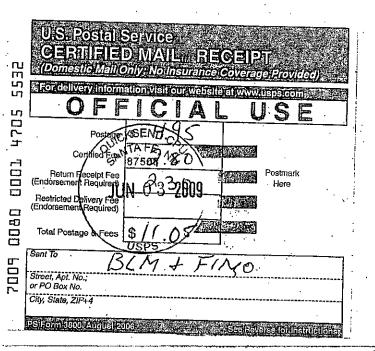
<u>Applicant Name:</u> Nacogdoches Oil & Gas, Inc. (936) 560-4747 <u>Applicant's Address:</u> P. O. Drawer 632418, Nacogdoches, TX 75963

<u>Submittal Information:</u> Application for a salt water disposal well will be filed with the NM Oil Conservation Division (NMOCD). If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood



EXHIBITH

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Please call me if you have any questions.

Sincerely,

Brian Wood

Postario Sent To BLM + FINO

Sireel, Apt. No.:
or PO Box No.
City, State, ZIP+4

EXHIBITH

Affidavit of Publication

S	I	Ά	٦	Ē	OF	NEW	MEXI	CC

) SS

COUNTY OF MCKINLEY

/ February 17, 2013

LYDIA JOE being duly sworn upon oath, deposes and says:

As LEGAL CLERI published in and havi New Mexico and in the general circulation in of Grants, New Me Apache County, Arizo City of Window Rock affidavit based upon sworn to. That the pure was published in said publication and said proper, and not in a	ng a general of Cibola County xico and have and in the Arizona there a personal knoblication, a cod newspaper a notice was	circulation in Molup, New Mexico a ying a general e City of St. Johein: that this afficiowledge of the py of which is hiduring the perioduring the published in the	Kinley County, and having a circulation in the city circulation in the ant makes the facts herein ereto attached and time of the newspaper
publication being on t	he 8 th day o	of May	
20 09 , the second	publication be	ing on the	day
ofon the	20	, the third pu	blication being
on the	_ day of	20	0
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and the last publication	on being on the		day of
newspaper, in which s	20 _		That such
newspaper, in which s	such notice or	advertisement v	vas published,
is now and has been			
for such purpose, advertisements within			
of the statutes of the	State of New-	√exico 1941 co	moilation
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		Notary Public	
My commission expire	<i>\$\$4</i> 0.″ ⊝S:	•	

CLEGAL NOTICE

Gallup-McKinley County

New Mexico

Nacogdoches Joil fand Gas Inc. 1st.
applying 10, feenter the South Horself So

EXHIBIT