, ,	
5/	4/03 Stylester 1/03 ENGINEER DRC LOGGED IN KN TYPE SWD DAR NO309228797
	ABOVE THIS LINE FOR DIVISION USE ONLY
	NEW MEXICO OIL CONSERVATION DIVISION
	- Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
	ADMINISTRATIVE APPLICATION CHECKLIST
	HIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Арри	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 MAY 1 4 2003
	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
	[D] Other: Specify
[2]	NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply [A] Uorking, 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.

WILLIAM F. CARE	william F. Earl	Amousy	3-31-03
Print or Type Name	Signature	Title	Date
		e-mail Address	dhart.com

OK op foul last 5/25/03

3275'- 31/20' SEUCA RUER Gueren BUCR- 3260'

HOLLAND & HART LLP

DENVER • ASPEN BOULDER • COLORADO SPRINGS DENVER TECH CENTER BILLINGS • BOISE CHEYENNE • JACKSON HOLE SALT LAKE CITY • SANTA FE WASHINGTON, D.C.

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P.O. BOX 2208 SANTA FE, NEW MEXICO 87504-2208 110 NORTH GUADALUPE, SUITE 1 SANTA FE, NEW MEXICO 87501-6525

May 14, 2003

VIA HAND DELIVERY

Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 1220 South Saint Francis Drive Santa Fe, New Mexico 87505 TELEPHONE (505) 988-4421 FACSIMILE (505) 983-6043

William F. Carr

wcarr@hollandhart.com

RECEIVED

MAY 1 4 2003

Oll Conservation Division

Attention: Will Jones David Catanach

Re: Application of Raptor Resources, Inc. for Salt Water Disposal, Lea County, New MexicoB. Davis Well No. 2

Dear Mr. Jones and Mr. Catanach:

By letter dated April 16, 2003, the Oil Conservation Division returned to Raptor Resources, Inc. its administrative application for authorization to inject produced water in the B. Davis Well No. 2 located 333 feet from the South line and 2310 feet from the West line of Section 34, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico. In this letter, the Division expressed concern about granting additional permits to inject into the Seven Rivers Reef and into this producing oil pool.

Raptor proposes to use the proposed disposal well to re-inject into the Seven Rivers formation water produced from its B. Davis Well No. 3 located 1650 feet from the South and West lines of Section 34. Raptor has been unsuccessful in its attempts to find an alternative way to dispose of this produced water and the B. Davis Well No. 3 remains shut in until a way to dispose of this water can be found.

In response to our recent conversations concerning this application, I am enclosing Raptor's Geological Justification with attached documents and cross section, that demonstrates that the Capitan Reef is not developed in or near to the Seven Rivers interval that Raptor proposes to use for injection. There is no log on the B. Davis Well No. 3 but the completion interval in the well (2900'-2934' and 3357'-3448') is shown on the right side of the log of the B. Davis Well No. 2 on the cross section. The proposed injection interval is from 3275'

Oil Conservation Division May 14, 2003 Page 2

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to 3420'. As you will see from the enclosed information, Raptor's proposal will not re-pressure any zone but will simply re-cycle water back into the same Seven Rivers carbonates from which it is produced. The net effect of the proposed production of oil and water and the re-injection of the produced water will be a reduction of the total fluids in this reservoir.

Raptor herewith re-submits its application for authorization to inject in this well. References to the Seven Rivers "reef" in the exhibits attached to the original application were incorrect and references to the "reef" have been deleted. Notice was previously provided to affected owners when the application was filed. Based on the application and the enclosed information, Raptor requests that the Division reconsider this application.

If you have questions concerning the enclosed, please advise.

Very truly yours,

William F. Carr

Enclosures

cc: Mr. Paul F. Kautz Mr. John Lawrence Mr. David Pearcy

HOLLAND & HART LLP

Oil Conservation Division May 14, 2003 Page 3

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Mr. Paul F. Kautz Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240

Mr. David Pearcy 214 West Texas Suite 1015 Midland, Texas 79701

Mr. John Lawrence Raptor Resources, Inc. Post Office Box 2342 Midland, Texas 79702

Raptor Resources, Inc. Geologic Justification for B. Davis #2 SWD Sec 34, T 23S R36E, Lea Co, NM May 6, 2003

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The enclosed SW-NE Cross-section demonstrates that the Capitan Reef is not developed in or near the Seven Rivers interval that Raptor intends to use for re-injection of produced water in B. Davis #2. The NMOCD can be assured that Raptor's proposed SWD will not be connected to any portion of the Capitan Reef.

On the right (NE) side of the cross section is one of the few Density-Neutron logs for this area, ARCO's Guthrie "WN" #3, located in Spot J of Sec. 34. This log is recognized as "shelf", with typical development of Yates, Seven Rivers, and Queen sands, all of which easily correlate to other "shelf" wells farther east. The log response shows that all carbonates are tight shelf dolomite; there are no limestones present that could possibly be labeled "Capitan".

Raptor's B. Davis #2 at spot N (the proposed SWD) is the next well on the section, and is 1900' SW of Guthrie "WN" #3. This gamma-ray/neutron log is not deep enough to the Queen, but excellent correlation of the Seven Rivers sands clearly indicates that no Capitan reefing exists at this point. Isopachs of the Yates interval and Seven Rivers (to the top of the "G" Sand) in B. Davis #2 are within 10% of the isopach values in Guthrie #3, further substantiating that no anomalous thickening due to reef development has occurred. Therefore, we can be reasonably certain that if **any** Capitan Reef is present in B. Davis #2, it would have to be below TD of the well. Raptor intends to dispose at 3276-3420, or within the upper 175' of the Seven Rivers shelf dolomite section where no Capitan reefing is present.

No log is available on B. Davis #3, (spot K) the high-watercut producing well 1500' north of B. Davis #2. Operator's tops for the well are Yates at 3036 (+348) and Seven Rivers at 3248 (+136). Since these tops are very similar to B. Davis #2, and the well is stratigraphically on-strike to B. Davis #2, we can safely assume that sand and carbonate development is similar in these two wells. The measured depth of current perforations in B. Davis #3 is shown next to the B. Davis #2 log on the cross-section. There should be no doubt that Raptor is not re-pressuring any zone, but is simply re-cycling water back into the same Seven Rivers carbonates from whence it came. The Yates is not believed to be producing any water, since offset wells completed in the Yates alone are water-free.

The plugged B. Davis #1 at Spot M (1900' west of B. Davis #2) is the next log on the section, but is only deep enough to identify the Seven Rivers "D" Sand. The Yates interval has thickened from 212' to 252' (+19%) suggesting that Capitan reefing is possibly beginning at this location and would develop even more SW of here. However, the "D" sand is still present, thus confirming that the upper portion of the Seven Rivers Formation is still "shelf", and not Capitan reef. The south offset to this well (Vaughn "B-3" #2 in spot D of Sec 3) has very similar stratigraphy and an equivalent TD to B. Davis #1, so it offers no additional geologic insight.

The westernmost log on the cross-section is Jal WSW #6, near the center of NE/4 of Sec 4, or 2500' SW of B. Davis #1. With the Yates interval thickened 22% to 307', and probable absence of the Seven Rivers "D" through "G" sands, the upper Seven Rivers section here is likely

replaced by Capitan Reef, although more recent studies (below) question if Sec. 4 would be truly reef.

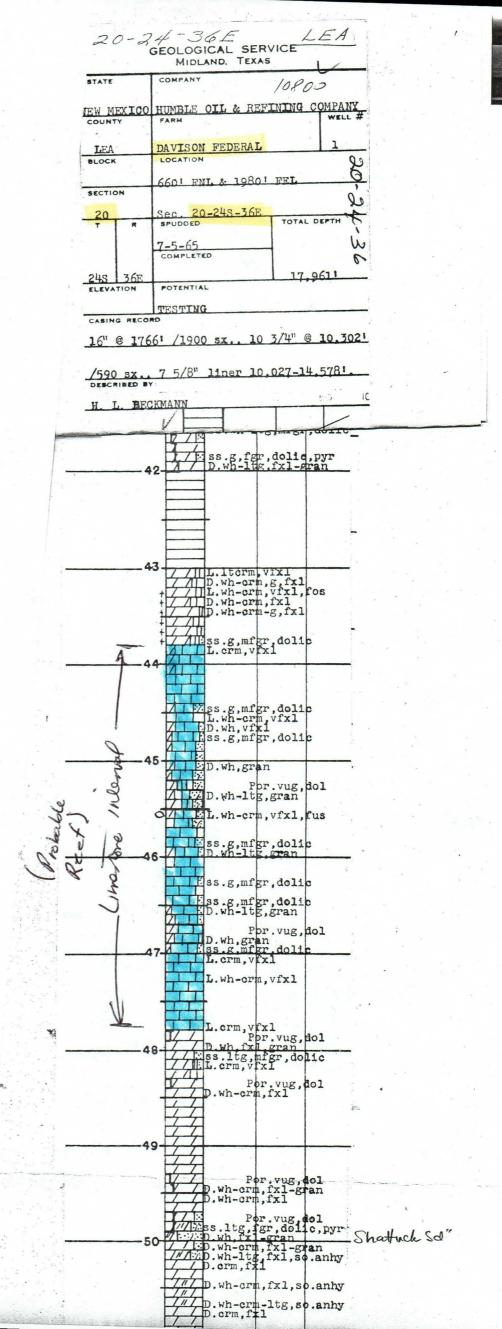
SEPM Special Pub #65 (1999) contains "Subsurface Expression of the Capitan Depositional System and Implications for Hydrocarbon Reservoirs, Northeastern Delaware Basin", written by Paul Harris and Arthur Saller, and is attached, with highlighting of pertinent portions. The authors use seismic to conclude that only a remnant of reef exists at the Humble Davidson Fed #1 well in Sec 20, T24S R36E. The attached sample log for this well has 400° of probable-Capitan limestone, beginning about 430° below Top of Seven Rivers. The authors reiterate that limestone is the most typical lithology for Capitan reef, and that true Capitan reefing will trend NNW through this township.

Therefore, a geologist would reasonably conclude from the NNW strike of the Capitan, that WSW #6 in Sec 4 (T24S R36E) must be less "reefal" and more on the shelf than Sec. 20. Based on the new evidence in the SEPM publication, it is also geologically reasonable that Raptor's proposed. Davis #2 SWD in Sec 34 would also be more shelfal and even less likely to contain any Capitan remnant.

The new studies also suggest that the NM Bureau of Mines' Resource Maps #4 through 6 probably are "generous" in showing such a wide extent for the Capitan, at least in T23-24S R36E. There appears to be little if any wellbore or seismic evidence to dictate that any Capitan reefing exists at the location of Raptor's proposed SWD in spot N of Sec 34, T23S R36E.

Raptor respectfully submits to the NMOCD that no Capitan reefing is present in the proposed SWD (B. Davis #2), and requests that this revised Application for Authorization to Inject into the Seven Rivers shelf dolomite be approved administratively.

Geologist



T/7 Rivers: 3945 por Eleg

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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



APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pr Application qualifies for administrative approval? X	essure Maintenance XDisposalStorage YesNo
IJ.	OPERATOR:Raptor Resources, Inc	
	ADDRESS:901 Rio Grande, Austin, TX. 78701	
	CONTACT PARTY:John Lawrence	PHONE: 915-684-6474
111.	WELL DATA: Complete the data required on the reverse side of t Additional sheets may be attached if necessary.	his form for each well proposed for injection.
IV.	Is this an expansion of an existing project?YesYYesYYesYYesYYesYYesYYesYYesYYAS	X _No

- 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:
 - 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. 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:Bill Keathly	TITLE: Regulatory Agent
SIGNATURE: Fiel Zachy	DATE: 3-12-03

* 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: Side 2

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.

RAPTOR C-108 ITEM III FOR SWD IN B.DAVIS #2 Injection Well Data Sheet

3/10/2003

Operator:Raptor Resources, Inc.WellB. Davis #2(API 30-025-09463)Loc:330 FSL & 2310 FWL(Unit Letter N), Sec 34, T23S R36E, Lea Co, NM

Surface Casing

.1

Hole size	13"	Csg. size	10 3/4"	Set at 279' w/ 200 sx
Top Cmt	Surf.	Method used:		50% fillup
·	Intermediate Casing			
Hole size	8 3/4"	Csg. size	7"	Set at 1368' w/ 225 sx
Top Cmt	517	Method used:		50% fillup
-	Production Casing			
Hole size	6 5/8"	Csg. size	5 1/2"	Set at 3532' w/ 255 sx
Top Cmt	2354	Method used:		CBL (3/28/84)
-				

Wellbore diagrams:Attached (Current and Proposed)Prop. injection intv:3275-3420 (Seven Rivers)Tubing size:2 3/8" FGPacker setting depth:3250Type of Packer:Baker Loc-setLining material:fiberglass

This is not a new well for injection; well was completed as an oil producer in 1940.

Injection formation:	Seven Rivers
Field/Pool:	SWDJalmat Pool

Other zones perforated:3486-3500 (Langlie-Mattix pool in 3/72)
Squeezed 3/84--sqz w/ 200 sx and CR @ 3462Other zones perforated:3295-3418 (Jalmat pool in 3/84;Never produced)
Squeezed 3/84 w/ 200 sx and CR @3278.Other zones perforated:3048-3240 w/21 holes (Jalmat in 4/84; Last prod 6/97)
Plan to squeeze w/ 200 sx, drill out to PBTD 3462, and perf Sev. Riv. Shelf dolomite.

Other oil and gas zones in this area:

No pool overlies the Jalmat (Tansill-Yates-Seven Rivers) Pool Langlie-Mattix Pool (not producing within 1/2 mile) underlies the Jalmat Pool

Note: the Seven Rivers is the disposal zone in other nearby SWD's: e.g. Roca Prod. Etz #3 in Spot N Sec 27

RAPTOR C-108 ITEM VI--Tabulation of Offset wells--attached

RAPTOR C-108 ITEM VII FOR SWD IN B.DAVIS #2

1. Proposed avg daily disposal rate:650 b/dmax daily rate:650 b/d2. System will be closed3. Proposed avg injection pressure:0 psimax pressure:500 psi4. Source of injection fluid:Prod. waters from Raptor's B. Davis #3 (Jalmat oil well)
(analysis attached)(Jalmat oil well)

5. Chemical analysis of disposal zone waters (same as #4 above; compatibility test NA)

RAPTOR C-108 ITEM VIII

- 1. Injection zone name:
- 2. Lithology:
- 3. Thickness:
- 4. Tops in this wellbore:

Seven Rivers Reef (Jalmat pool) Dolomite approx. 145' of perf interval Yates 3034 Sev. Rivers 3246 (434' below Top 7R)

- 5. Uphole fresh-water aqiufers:
- 6. Downhole fresh-water aquifers:

Shallow alluvium zones at 75-220' None

RAPTOR C-108 ITEM IX

Proposed stimulation for B.Davis #2:

2500 gal 15% acid

RAPTOR C-108 ITEM X

Logs on B. Davis #2 are already on file at OCD (copy attached).

RAPTOR C-108 ITEM XI

Chemical analyses of fresh-water aquifers within one mile: Not applicable Location of fresh-water wells within 1 mile: None (2 water wells perf'd at 175' to 220' are twins to WSW#7 in ctr SE/4 Sec 4, just outside the one-mile circle)

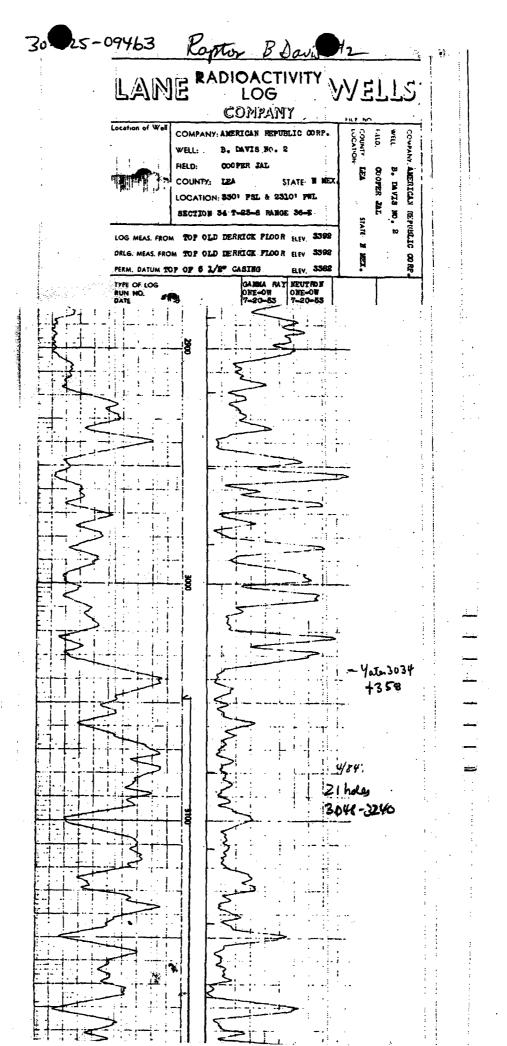
RAPTOR C-108 ITEM XII

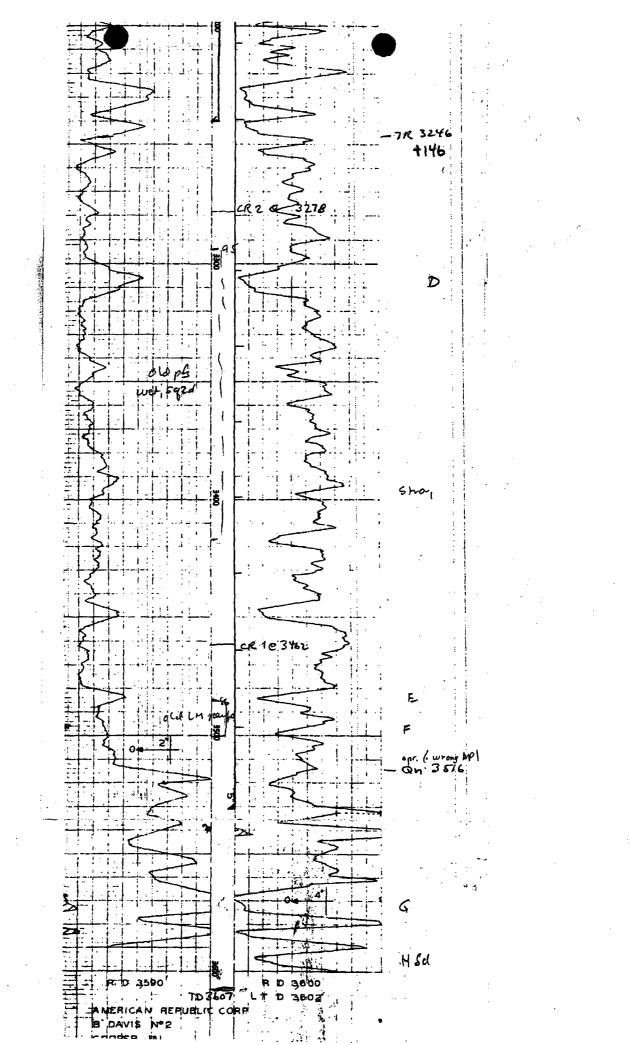
We have examined the available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

CURRENT OPERATOR	WELL NAME	API # 30-025	LOC'N	SPOT	S-T-R	STATUS	COMP DATE	TD	PBTD	POOL/ FM.	TOP 7 RIV.	CASING	T/ CMT. @ 50%fillup	COMP. INTV.	iP	Raptor 3/10/03
															-	
BP/ARCO	Guthrie WN #3	26630	1980 FSL &	J	34-23-36	P&A	3/11/80	3750	3704	7 Riv	3290	8 5/8" @1235	surf	3505-3612	15 BOPD	•
			1980 FEL			5/12/94	9/6/85	1	3312	Yates		5 1/2@3750	surf	3082-3287	312 MCFD	•
Raptor Res.	B. Davis #3	09464	1650 FSL &	к	34-23-36	PB	1/26/41	3623	3452	7 Riv	3248	10 3/4"@264	surf	3357-3448	20 MMCFD	
			1650 FWL			Act	3/1/45	}	3329	Yates-7R		7" @136 5	200	2900-3328		
												5 1/2" @ 3526	2037			
Harris & Walton	B. Davis #1	09457	1650 FSL&	L	34-23-36	PB	1/15/38	3610	3610	7 Riv	3418	10 3/4"@321	surf	oh3536-3610	101 BOPD	
		[[330 FWL			Act	9/15/75		3416	Yates		7 5/8"@1411	surf	3372-3389		
												5 1/2"@3536	surf			
Raptor Res.	B. Davis (ARC) #1	09462	330 FSL &	м	34-23-36	P&A	11/9/37	3621	3621	7 Riv	3430	13"@287	90	oh3572-3621	2680 BOPD	
			330 FWL			12/6/82	8/11/53		3490	7 Riv		9 5/8@1416	693	3468-3478	18 BOPD	
	·											7"@3572	1380 & surf			
Raptor Res.	B. Davis #2	09463	330 FSL &	N	34-23-36	PB	12/3/40	3607	3607	7 Riv (L)	3246	10 3/4"@279	surf	oh3532-3607	100 BOPD	
PROPOSED SW	D		2310 FWL			PB	3/22/72		3520	7 Riv (L)		7" @ 1368	517	3486-3500	30 BOPD	
		· ·				Ina 6/97	4/6/84		3278	Yates		5 1/2" @3532	CBL:2354	3048-3240	306 MCFD	1
BP/ARCO	Guthrie WN #1	09460	660 FSL &	0	34-23-36	P&A	3/3/37	3928	3928	7 Riv (L)	proj3300	12 1/2@271	123	oh3300-3928	24 MMCFD	
	•		1980 FEL			2/15/74	6/24/43		3470	Yates-7R	·	9 5/8"@1380	537	2980-3470	4.5 MMCFD	
						·	5/27/65		3265	Yates		7"@3300	2200	2940-3265	97 MCFD	1
Tenison	VaughnB3 #5	09500	990 FNL &	C	3-24-36	P&A	4/25/42	3590	3570est	Yates-7R	est3250	8 5/8"@1446	576	3220-3350	10 MMCFD	
			2310 FWL			1/18/02						5 1/2"@3576	2214		·	
Tenison	VaughnB3 #2	09501	330 FNL &	D	3-24-36	Act	3/16/38	3638	3620est	Yates	3512	12 1/2 '@ 308	62	3451-3506	2690 BOPD	
			330 FWL									9 5/8"@1424	482			
												7"@3575	2594			1
Tenison	VaughnB3 #1	09503	1980 FNL &	F	3-24-36	РВ	1/21/37	3577	3577	7 Riv (L)	3267,	12 1/2 "@ 254	58	oh3535-3577	100 BOPD	NOTE:
			1980 FWL		· 1	Act	1/5/57		3300	Yates		9 5/8"@1602	848	3060-3186	2650 MCFD	7 Riv (L) mean
												7"@3535	2554			>200' below T/ 7

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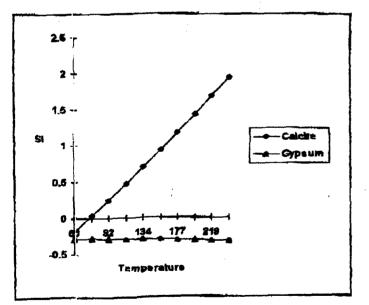
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-14"-175-2C	21	Varra- 4000) 22-1: 2001 Energan	2. 3 4 4 7 6 3 8 7 1 1 5 7 1 met.	Den 24 Jon 10 10 10 10 10 10 10 10 10 10 10 10 10
Victoriand 	۳۵۵ ۳۵۵ ۳۵۵ مهم ۵۵ مالی ۲۵۵ مهم ۲۵۰ مالی ۲۵۵ مهم ۲۵۰ مالی ۲۵۵ مهم ۲۵۰ مالی		GLIE LYNN(QN)	(78) Store (1997)
Conoco,etal M.B.P.	Court of the second of the sec	Burgundy Energen	ENERGEN(OPER.)	ARCO y wy Lankford BP Amer. WW Tripper L Corport
21644	Condition 64 91278 4	Rece Frad. 27 CME Org	E 21 . Refr. WESKET	A CO. LUNAFORD TA
	Tenisun DEG ^(+ec) Tenisun DEG ^(+ec) To 4000 Cont - D.F Lyng - 4 c 20 W	Clay Grp. Tr. etal) - 3 31 2001 2 54 1 1000 1001 1 1000 1000		1 B 25 0
U.S. rtador Oxy r.BP. (12007	(BP Amer) 3 West- Westbroch 3 brock Uni 9300°, Citation OE.G	Grenbrer Stat 3620 A n Combes Grenbrer Stat Stat Amer Inland Stat Stat Stat Stat Stat Stat Stat Stat	J.T. Lynn BP Amer Arch Pett	Lynn Apacne # 66 2 min ?. 66 mil # 63
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itra-Les Ltd (S) & premerte	whit T 24S R 36E	U.S. 1000 RRR Ld.E. (at (S) 100 RRR Ld.E. (at (S) 100 100 100 100 100 100 100 100 100 100	Freed Cooper Darla Van	

Champion Technologies, Inc. Water Analysis Report 3/11/2003 Addres; Committed To Improvement (well#3) Lease: B. Davis Customer: Raptor Resources Formation: Attention: Joel Sisk CC: Sample Point B. Davis 3 Target Neme: 8. Davis 3 Sample Date: 03/11/2003 Test Date: 03/11/2003 Appended Date(mg/L) **Physical Properties** Water Analysis(rng/L) Ionic Strangth(Calc.) 1524 180 D.30 C02 Calchum 243 H28 308 pH(calc.) 6.45 Ragnesium iron 7 Temperature("F) 80 Barium Oxygen Pressure(pale) 50 Strontium 2985 Density 8.41 Sodium(calc.) Additional Data 805 Bicarbonate Alkolinky Specific Gravity 1.01 Dew Point 2086 Total Dissolved Solids(Mg/L) Sullate 13643 Lesd Total Hardness (CaCO3 Eq MgA.) 6000 Chloride 4806 Zinc Catche Calculation Information

Calculation Method	Value
CO2 In Brine(mg/L)	180
Remarks:	

Scale Type		PTB
Calcite (Celcium Carbonate)	0.23	83.90
Gypsum (Calcium Suttate)	-0.28	
Hemihydrate (Calcium Sulfate)	-0,15	
Anhydrite (Calcham Builate)	-0.52	1
Barite (Berlum Sullate)		
Colestite (Strontius Suffate)		1

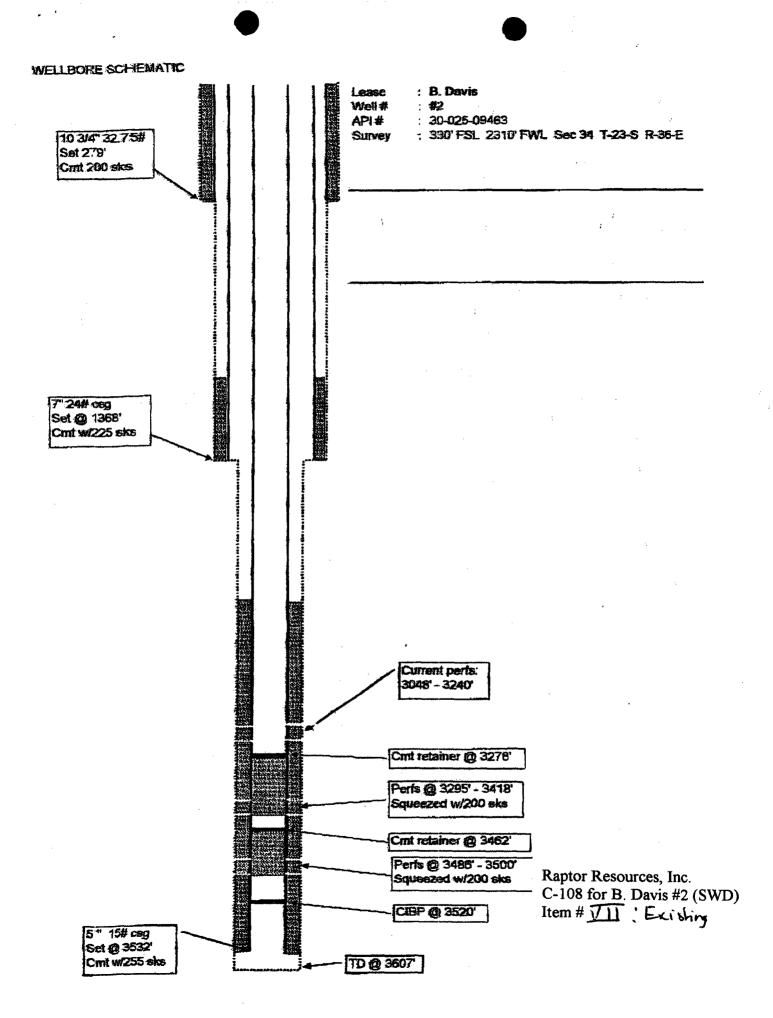
Saturation Indices

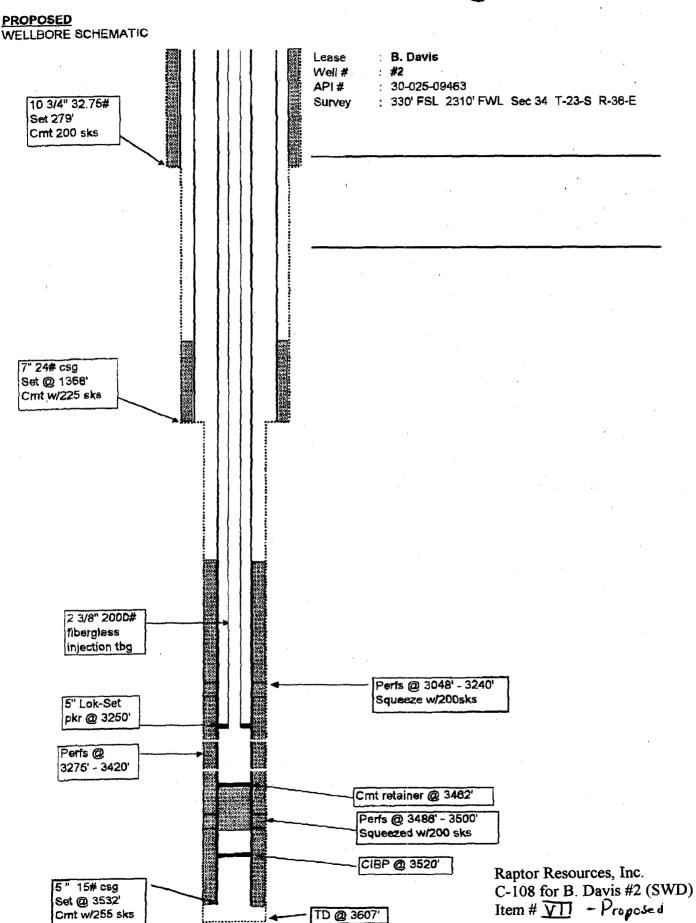


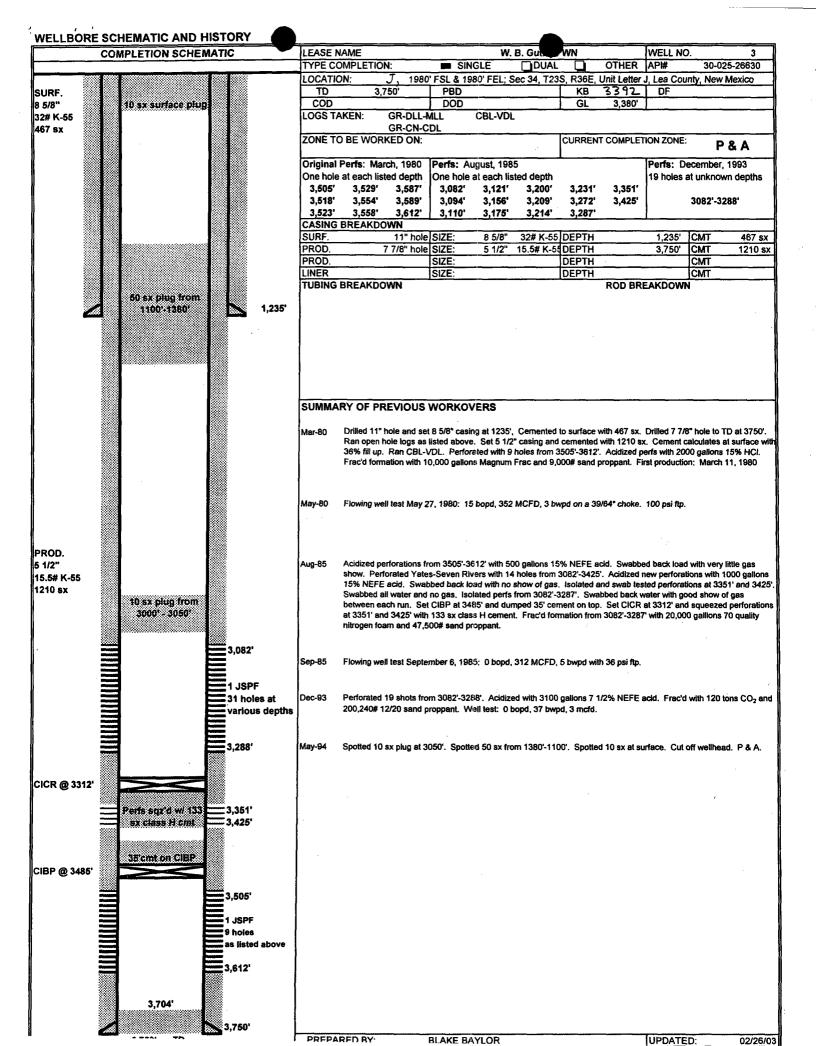
Saturation Index Data Points

	Calcito	Gypsum
50	-0,17	-0.27
71	0.04	-0.27
92	0,25	-0.26
113	0.47	-0,28
134	0.70	-0.29
156	0,93	-0.29
177	1.18	-0,30
198	1.49	-0.30
218	1.69	-0.31
240	1,96	-0.31

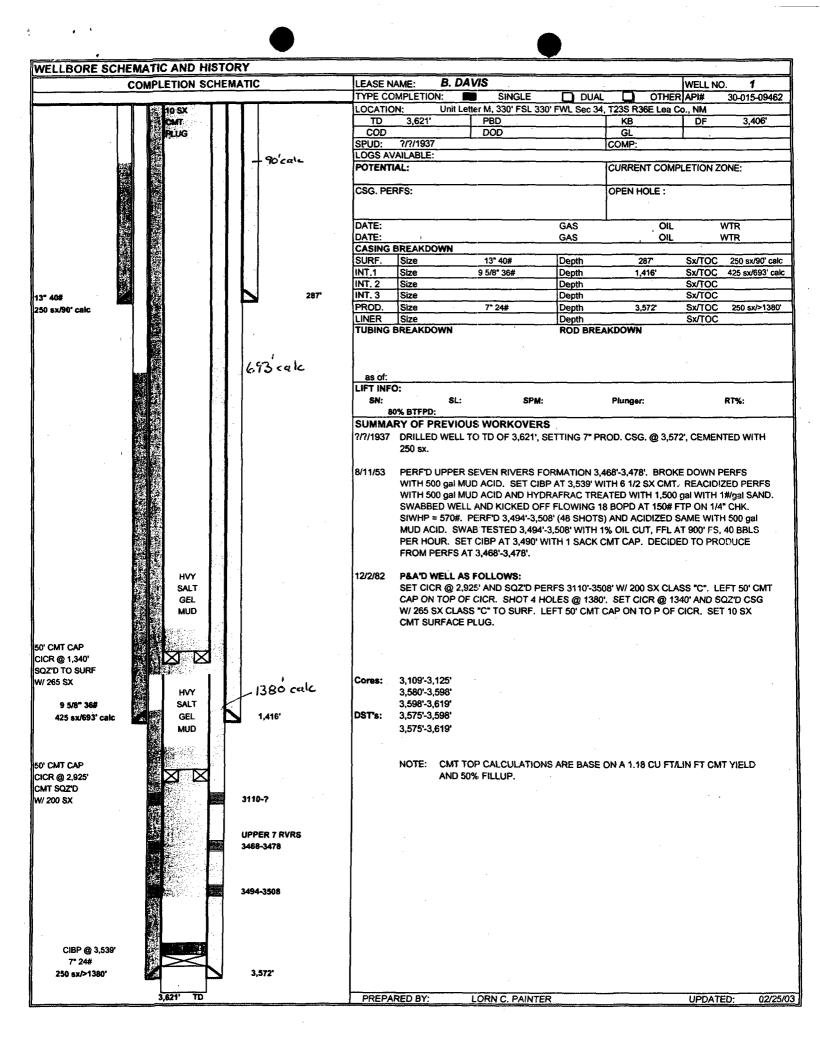
Raptor Resources, Inc. C-108 for B. Davis #2 (SWD) Item # 777 -4

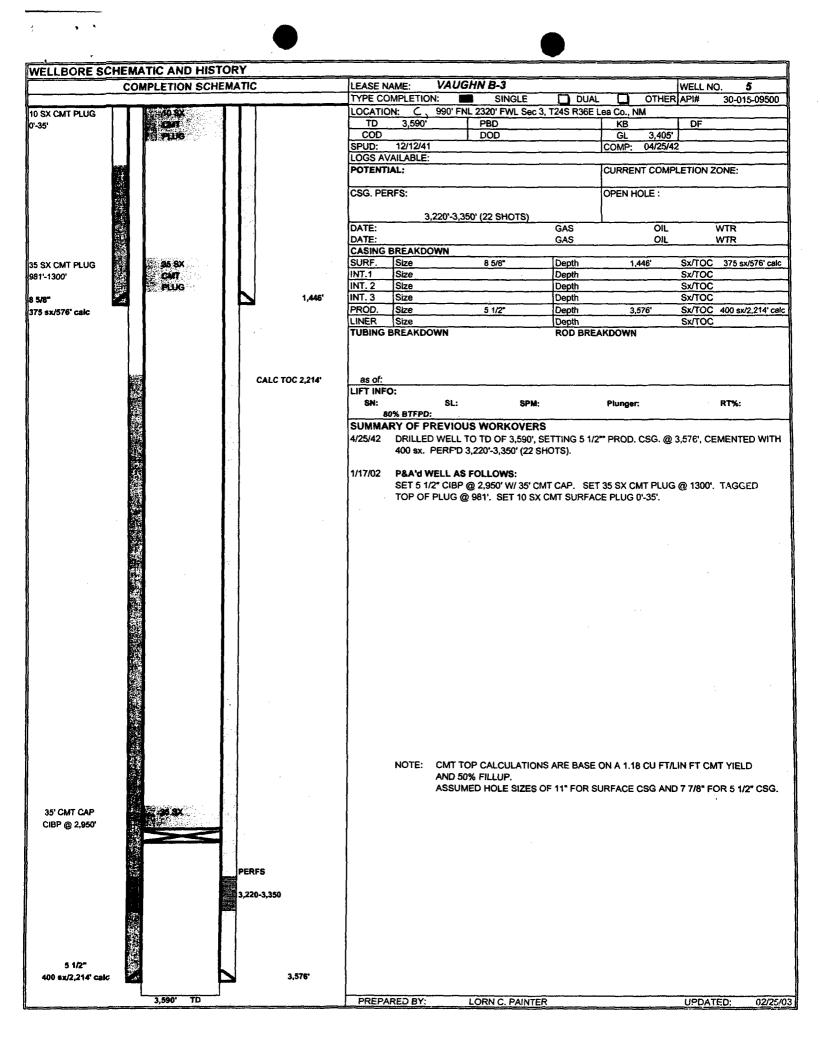






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				MPLETIO				R API#	30-025-09460	
15 SX CMT PLUG	EMT		LOCATIO TD	<u>N: ()</u> 3,928'	660' FSL 1980' FEL 5	ec 34, 1235 R36E	KB	DF	3,406'	
0'-25'	PLIG	123'cale	COD	3,920	DOD		GL 3,38		3,400	
· · · · · · · · · · · · · · · · · · ·		123 care	SPUD:	12/09/36			COMP: 03/03			
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			POTENTI	AL:			CURRENT COM	IPLETION 2	ZONE:	
			CSG. PEF	RES			OPEN HOLE :		·	
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			DATE: DATE:			GAS	OIL 'OIL		WTR	
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			SURF.	Size	12 1/2" 40#	Depth	271'	Sx/TOC	200 sx/123' calc	
40 SX CMT PLUG		9 5/8" CUT & PULLED		Size	9 5/8" 36#	Depth	1,380		400 sx/537' calc	
220'-320'	49.8X	@ 262		Size	·	Depth	· · · ·	Sx/TOC		
12 1/2" 40#		271'	INT. 3 PROD.	Size	7" 24#	Depth		Sx/TOC Sx/TOC		
200 sx/123' calc			LINER	Size	<u> </u>	Depth Depth	3,300'	Sx/TOC		
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			LIFT INFO):		· · · · · · · · · · · · · · · · · · ·	·····			
			SN:		SL:	SPM:	Plunger:		RT%:	
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					REVIOUS WORKO	and the second				
	· 查古 		12/9/36		WELL TO TD OF 3,9				NTED WITH	
1			1	2/5 SX. 3	SET CMT PLUG 3780	-3928, TO COMPL	ETE O.H. 3300-3	/80'.		
		j j	2/27/42	SET CM	FPLUG 3470-3780' T	SHUT OFF SUL	PHUR WATER.			
			6/24/43		2980'-3280' (323 SHO		/ 2000 gal. TESTE	ED 4500 MC	CFD, O BWPD	
				AND SLI	GHT SPRAY OF OIL					
			5/27/65	SET PUL	G (3 SX CALSEAL +	16.8 cal HYDROM	TE) 3265-3290'	STIMU ATS	D YATES	
			5/27/65 SET PLUG (3 SX CALSEAL + 16.8 gal HYDROMITE) 3265-3290'. STIMULATED YATES PERFS 2940'-3265' W/ 57,000 SCF CO2 + 80,000 SCF CO2 MIXED WITH 65 BBLS COND, 20 gal N-44, AND 20 gal B1-A. 1-PT TEST: 97 MCFD, 1 BLO, FTP=95# ON 1/4" CHK.							
				8 HR SIT	P=405#.			•.		
			10,000,000							
•			12/29/66		YATES PERFS 2968' min=1200# @ 36.3 Bi					
			1		11TE CAP 2992-3240					
					LASS "C". C.O. WEI					
			2/15/74		ELL AS FOLLOWS:		000 @ 0000 WC			
					P AT 2928' W/ 6 SX C SG @ 2192' AND PU					
					00'. CUT AND PULLE					
			[X CMT SURFACE PI	-				
9 5/8" 36#			j.							
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<i>a</i> · ·		W LIVE	1							
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	143	WOULD NOT PULL		NOTE:	CMT TOP CALCULA	TIONS ARE BASE	ON A 1.18 CU FT	MLIN FT CN	AT YIELD	
					AND 50% FILLUP.					
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		4 SQZ HOLES @ 2900'								
		SQZ W/ 294 SX								
50' CMT CAP		1	1							
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210 8AJ~42UU										
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	an a	CMT PLUG 3470-3780'	1							
			1							
	Sec. Oak State		1							
		148' CMT PLUG 3780'-3928'								





B. Davis Well No. 2 Section 34, T-23-S, R-36-E, NMPM API No. 30-025-09463

RE: APPLICATION FOR DISPOSAL WELL

I,

NOTIFICATION LIST:

Operators within Area of Review:

American Inland Post Office Box 50938 Midland, Texas 79710 Attention: Brian Sirgo

BP America Production Co. Post Office Box 22048 Tulsa, Oklahoma 74121

Harris & Walton Post Office Box 187 Midland, Texas 79702

Tenison Oil Co. 401 Cypress Street, Suite 500 Abilene, Texas 79601

Surface Owner:

Deep Wells Ranch Star Rt. 1, Box 244 Jal, New Mexico 88252 Attention: Kelly Myers

DENVER • ASPEN BOULDER • COLORADO SPRINGS DENVER TECH CENTER BILLINGS • BOISE CHEYENNE • JACKSON HOLE SALT LAKE CITY • SANTA FE WASHINGTON, D.C. P.O. BOX 2208 SANTA FE, NEW MEXICO 87504-2208 110 NORTH GUADALUPE, SUITE 1 SANTA FE, NEW MEXICO 87501-6525 TELEPHONE (505) 988-4421 FACSIMILE (505) 983-6043

William F. Carr

wcarr@hollandhart.com

March 31, 2003

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Tenison Oil Co. 401 Cypress Street, Suite 500 Abilene, Texas 79601

Re: Application of Raptor Resources, Inc. for administrative approval of salt water disposal, Lea County, New Mexico.

Ladies and Gentlemen:

This letter is to advise you that Raptor Resources, Inc. has filed the enclosed application with the New Mexico Oil Conservation Division seeking authorization to dispose of produced water in its B. Davis Well No. 2 located 330 feet from the South line and 2310 feet from the West line of Section 34, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico. Raptor Resources, Inc. proposes to inject into the Seven Rivers Reef formation through an injection interval from 3275 feet to 3420 feet. The initial maximum surface injection pressure proposed by Raptor Resources, Inc. is 500 pounds and the maximum daily injection rate will be 650 barrels of water.

If you have questions concerning this application, you may contact John Lawrence at Raptor Resources, Inc., Post Office Box 2342, Midland, Texas 79710, telephone number (915) 684-6474.

Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 within 15 days of the date of this letter.

Very truly yours,

William F. Carr Attorney for Raptor Resources, Inc.

DENVER • ASPEN BOULDER • COLORADO SPRINGS DENVER TECH CENTER BILLINGS • BOISE CHEYENNE • JACKSON HOLE SALT LAKE CITY • SANTA FE WASHINGTON, D.C.

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P.O. BOX 2208 SANTA FE, NEW MEXICO 87504-2208 110 NORTH GUADALUPE, SUITE 1 SANTA FE, NEW MEXICO 87501-6525 TELEPHONE (505) 988-4421 FACSIMILE (505) 983-6043

William F. Carr

wcarr@hollandhart.com

March 31, 2003

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Harris & Walton Post Office Box 187 Midland, Texas 79702

Re: Application of Raptor Resources, Inc. for administrative approval of salt water disposal, Lea County, New Mexico.

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Very truly yours

William F. Carr Attorney for Raptor Resources, Inc.

DENVER • ASPEN BOULDER • COLORADO SPRINGS DENVER TECH CENTER BILLINGS • BOISE CHEYENNE • JACKSON HOLE SALT LAKE CITY • SANTA FE WASHINGTON, D.C. P.O. BOX 2208 SANTA FE, NEW MEXICO 87504-2208 110 NORTH GUADALUPE, SUITE 1 SANTA FE, NEW MEXICO 87501-6525 TELEPHONE (505) 988-4421 FACSIMILE (505) 983-6043 William F. Carr

wcarr@hollandhart.com

March 31, 2003

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

BP America Production Co. Post Office Box 22048 Tulsa, Oklahoma 74121

Re: Application of Raptor Resources, Inc. for administrative approval of salt water disposal, Lea County, New Mexico.

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Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 within 15 days of the date of this letter.

truly your

William F. Čarr Attorney for Raptor Resources, Inc.

DENVER • ASPEN BOULDER · COLORADO SPRINGS DENVER TECH CENTER BILLINGS · BOISE CHEVENNE + JACKSON HOLE SALT LAKE CITY . SANTA FE WASHINGTON, D.C.

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William F. Carr

wcarr@hollandhart.com

March 31, 2003

CERTIFIED MAIL RETURN RECEIPT REOUESTED

American Inland Attention: Brian Sirgo Post Office Box 50938 Midland, Texas 79710

> Application of Raptor Resources, Inc. for administrative approval of salt Re: water disposal, Lea County, New Mexico.

Ladies and Gentlemen:

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Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505 within 15 days of the date of this letter.

Verv truly vours

William F. Carr Attorney for Raptor Resources, Inc.

DENVER • ASPEN BOULDER • COLORADO SPRINGS DENVER TECH CENTER BILLINGS • BOISE CHEYENNE • JACKSON HOLE SALT LAKE CITY • SANTA FE WASHINGTON, D.C.

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P.O. BOX 2208 SANTA FE, NEW MEXICO 87504-2208 110 NORTH GUADALUPE, SUITE 1 SANTA FE, NEW MEXICO 87501-6525 TELEPHONE (505) 988-4421 FACSIMILE (505) 983-6043

William F. Carr wcarr@hollandhart.com

March 31, 2003

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Deep Wells Ranch

Attention: Kelly Myers Star Rt. 1, Box 244 Jal, New Mexico 88252

Re: Application of Raptor Resources, Inc. for administrative approval of salt water disposal, Lea County, New Mexico.

Ladies and Gentlemen:

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Verty truly yours,

William F. Carr Attorney for Raptor Resources, Inc.

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1

weeks.

2003

2003

Beginning with the issue dated

March 22 2003 and ending with the issue dated

March 22

Publisher Sworn and subscribed to before

24th me this_ _day of

March

Notary Public.

My Commission expires October 18, 2004 (Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE March 22, 2003

Raptor Resources, Inc., 901 Rio Grande, Austin, Texas 78701, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced salt water in the B. Davis Well No. 2 located 330 feet from the South line and 2310 feet from the West line (Unit Letter N) of Section 34, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico The source of the disposed water will be from wells in the area which produce from the Jalmat formation. The disposal water will be injected into the Seven Rivers Reef formation (Jalmat Pool) at a disposal depth of 3275 feet to 3420 feet. A maximum surface injection pressure of 500 pounds (subject to subsequent increase after Division approved testing) and a maximum injection rate of 650 BWPD. Any interested party with questions or comments may contact John Lawrence at Raptor Resources, Inc., 901 Rio Grande, Austin, Texas 78701 or call (915) 684-6474. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice.

Published in the Hobbs News-Sun, Hobbs, New Mexico, Dated, March 22, 2003. #19663

67100754000 67512365

Holland & Hart LLC Post Office Box 2208 Santa Fe., NM 87504-2208