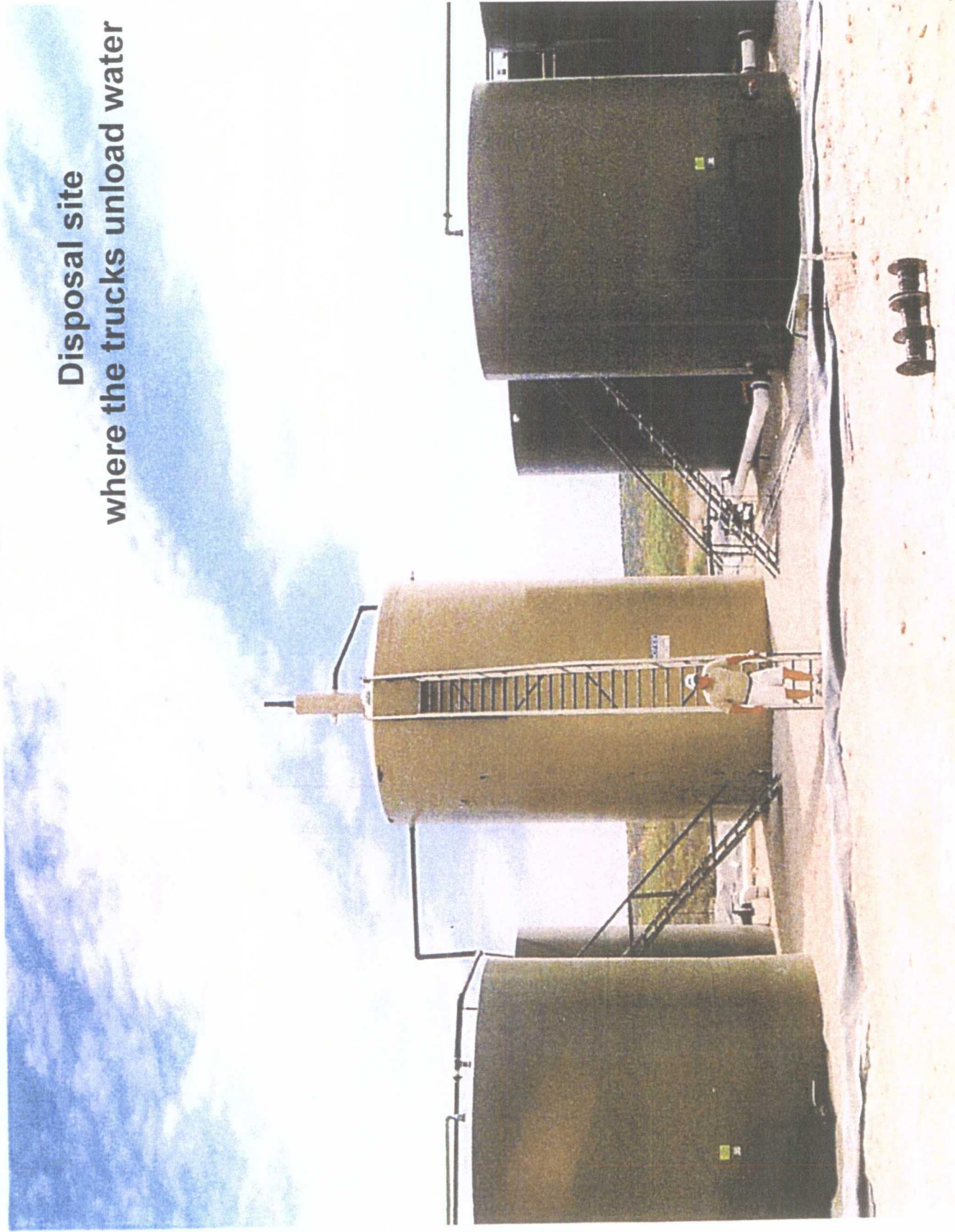


Mesquite SWD, Inc.

Exxon State No. 8

Disposal site
where the trucks unload water



Storage tanks

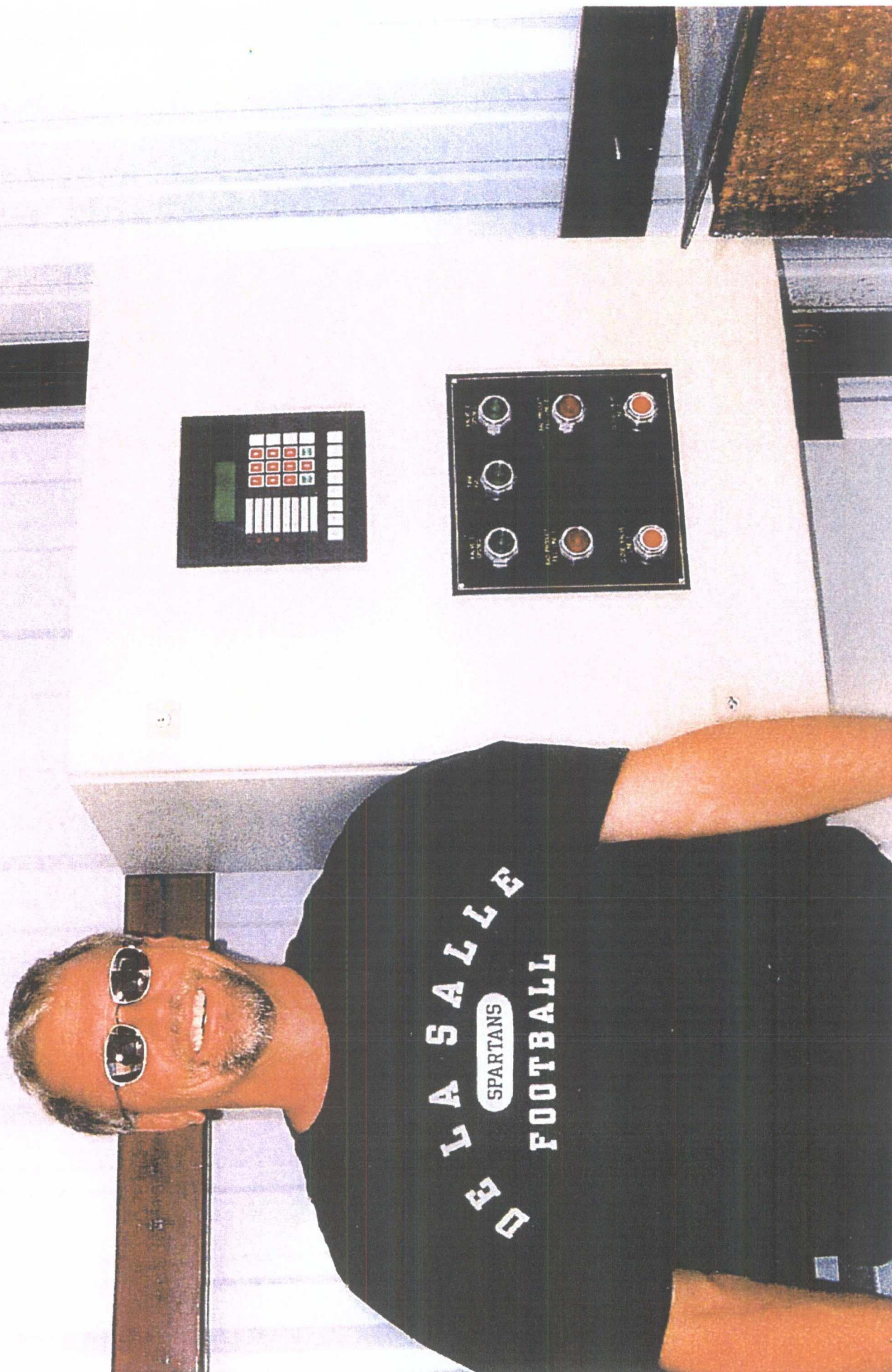
picture taken from the back of the facility



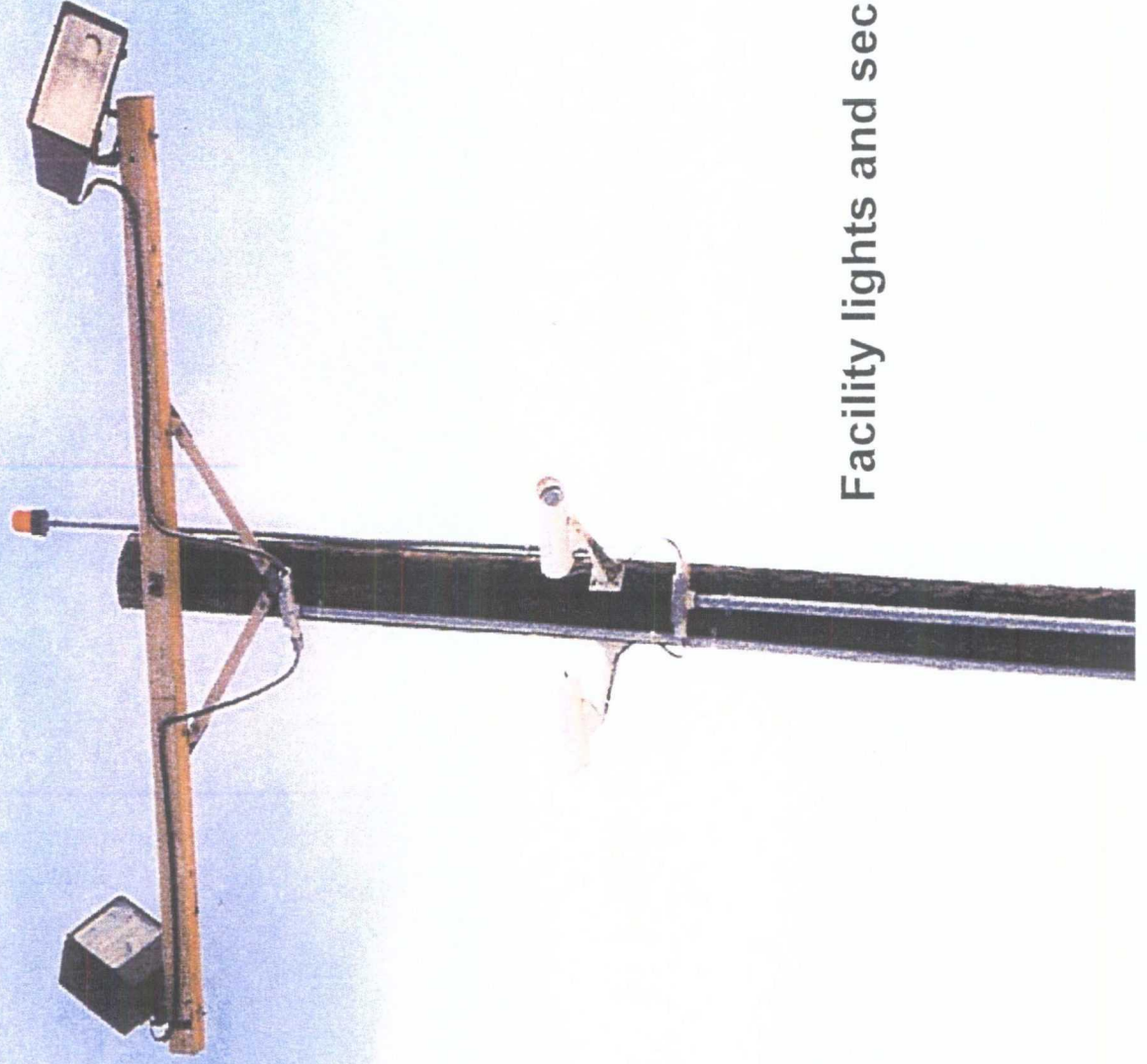
Trucks unloading water
into storage tanks



Facility computer system



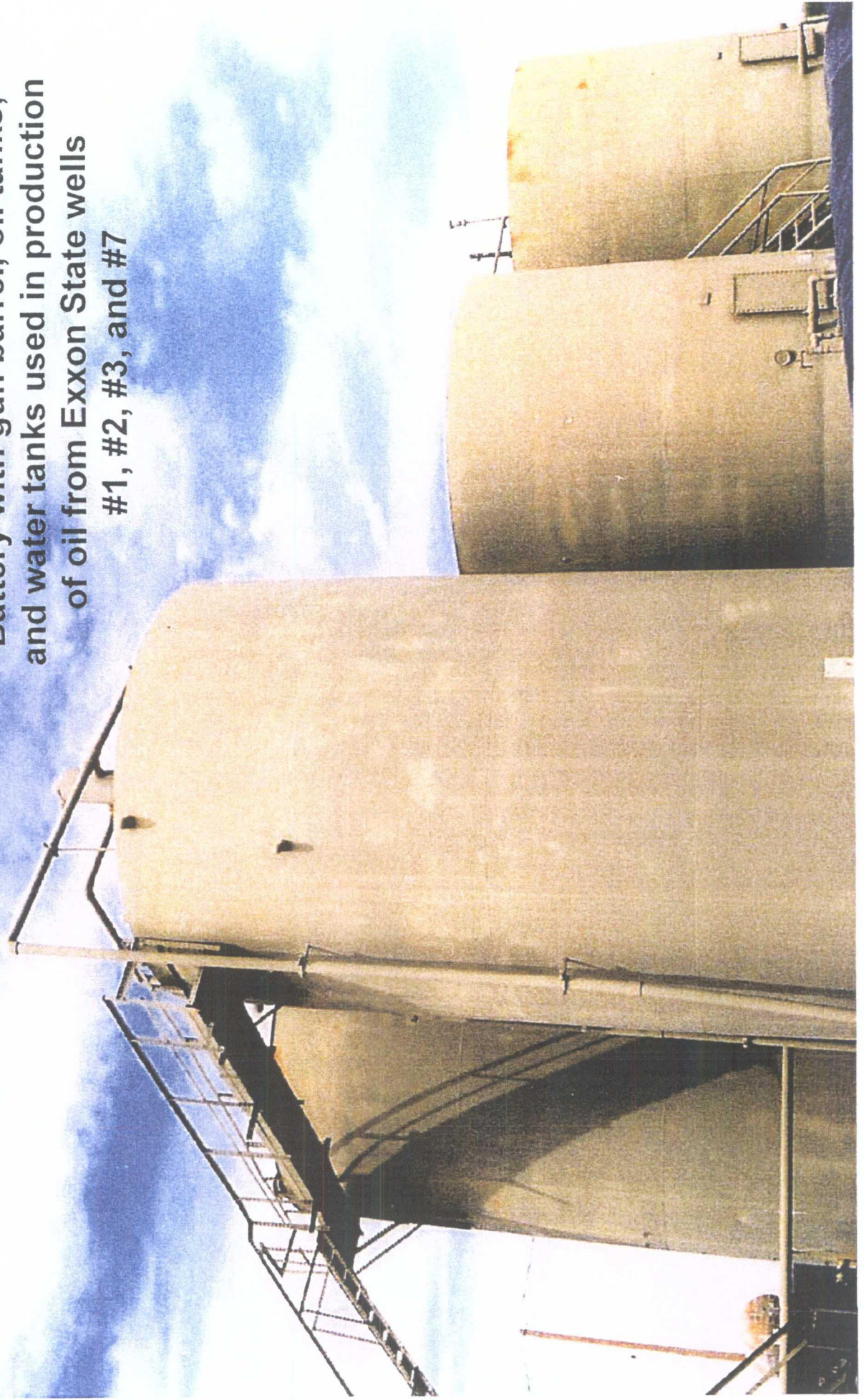
Facility lights and security cameras



Power lines extending from facility to producing wells



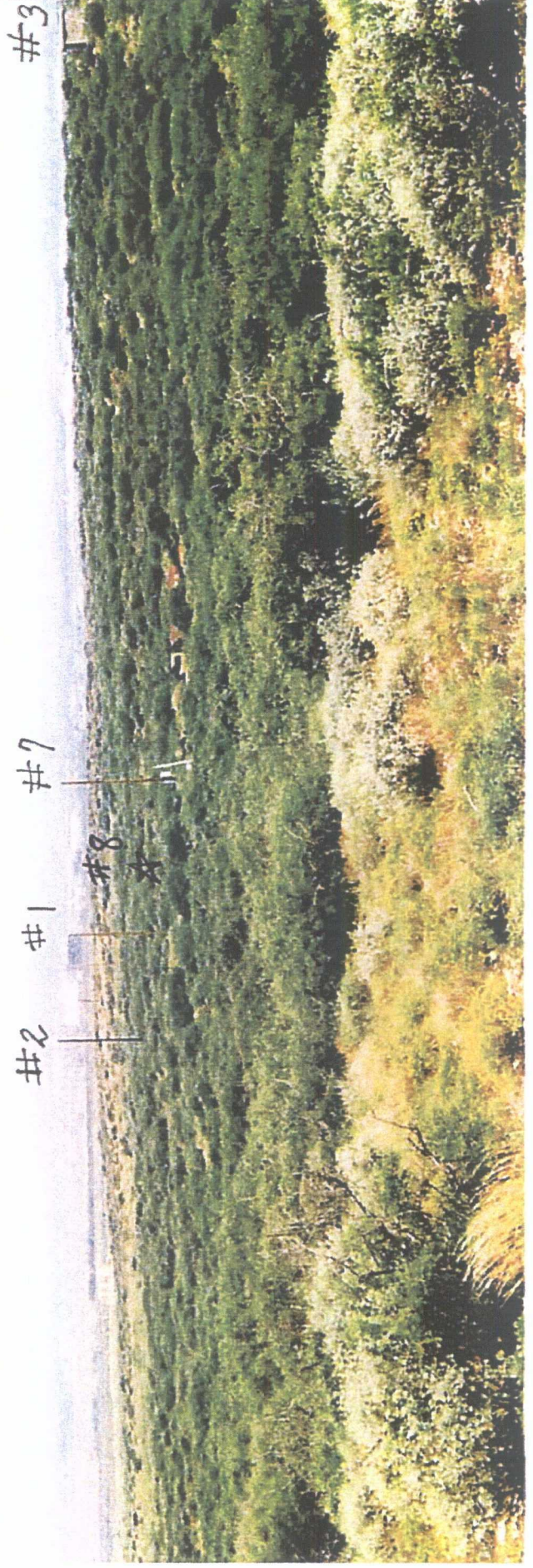
Battery with gun barrel, oil tanks,
and water tanks used in production
of oil from Exxon State wells
#1, #2, #3, and #7



Exxon State lease looking east.

Wells #1, #2, #3 and #7 are producing oil wells close to power poles.

The disposal well, Exxon State #8, is shown by the “*”



The article you requested is displayed below.

BLM investigating illegal fuel, brine water dumping

Author(s): Stella Davis Current-Argus Staff Writer Date:
September 25, 2008 Section: News

CARLSBAD - Illegal dumping of petroleum products and brine water on county rights of way and state and federal lands has become a problem, officials from the Bureau of Land Management's Carlsbad Field Office said. The BLM has joined with state land managers, New Mexico State Police and Eddy County to find the culprits. The federal agency is also asking county residents and field operators within the oil and gas industry to immediately report offenders.

"It's a crime to dump brine water or petroleum products on state and federal lands. We ask that people witness to this kind of dumping get as much information as they can without putting themselves in harm's way," said Jim Amos, BLM environmental protection specialist.

He said if the crime is in progress, witnesses should call 911. Getting down information such as a company name on a truck and a license plate number would be a big help in tracking down the truck driver who dumped the petroleum or brine water.

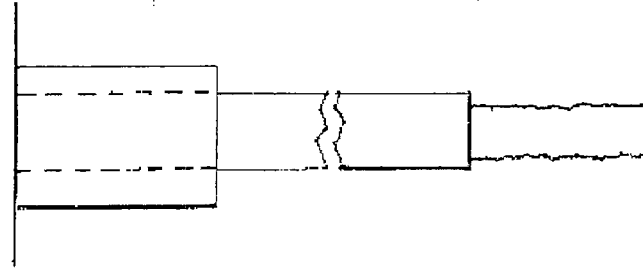
Amos said if the culprits are caught, they will be prosecuted to the fullest extent possible.

"We would prosecute them through the U.S. Attorney's Office," he added. "We get a lot of contact from the public about illegal dumping sites. But we don't get enough information from them to go after the people responsible. If people see the crime in progress, they should not confront anyone. Get as much documentation as you can and quickly call the authorities."

This past week the BLM found two sites in the Black River area - Black River Village Road and Bounds Road - where a petroleum product had been dumped along the rights of way.

On Black River Village Road, a path 450 feet long on the grassy shoulder is blackened and smells strongly of diesel fuel. On Bounds Road, the destruction is worse. The petroleum soaked ground stretches for about 1,285 feet. Black tire marks on the pavement

INJECTION WELL DATA SHEET

OPERATOR: Mesquite SWD, IncWELL NAME & NUMBER: 1268' FSL & 2032' FEL Exxon State No. 8WELL LOCATION: FOOTAGE LOCATIONUNIT LETTER O SECTION 15 TOWNSHIP 21S RANGE 27EWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 12" Casing Size: 8-5/8"
 Cemented with: 110 ss. or ft³
 Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 7" Casing Size: 5-1/2"
 Cemented with: 110 ss. or ft³
 Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 4-3/4" Casing Size: None
 Cemented with: ss. or ft³
 Top of Cement: Surface Method Determined: Surface

Total Depth: 694'Injection Interval567' 9 feet to Open hole to 694' TD

(Perforated or Open Hole; indicate which)

278' INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" Push joint Lining Material: Plastic coating

Type of Packer: ADI tension

Packer Setting Depth: 550'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____ Yes X No _____
 If no, for what purpose was the well originally drilled? Originally drilled as oil test in 1977. Not commercial in
Magruder (Yates) pay. Ran 5-1/2" then drilled to 694' for injection.
2. Name of the Injection Formation: Yates
3. Name of Field or Pool (if applicable): Magruder (Yates)
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____ No _____
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Magruder (Yates) 540' to 560' in the field
Deep gas (Morrow) below 11,000 'depth.

API	OPERATOR	WELL_NAME	TD	Elevation	Top Magruder	Magruder MSL	Top Yates	Yates MSL
3001532647	MEWBOURNE OIL CO	ESPERANZA 14 STATE 002	11850	3265	578	2687	363	2902
3001531877	MEWBOURNE OIL CO	ESPERANZA 15 STATE COM 001	11835	3302	578	2724	367	2935
3001532718	MEWBOURNE OIL CO	ESPERANZA 15 STATE COM 002	11835	3320	669	2651	420	2900
3001521167	BEPCO LP	BASS STATE COM 001	11700	3314	585	2729	358	2956
3001522055	MESQUITE SWD, LLC	EXXON STATE WD-8	694	3281	561	2720	348	2933
3001501101	H.E. YATES CO	CEDAR HILLS COM 001	12812	3269	566	2703	324	2945
3001521492	H.E. YATES CO	CEDAR HILLS COM 002	11750	3315	600	2715	428	2887
3001532938	PURVIS OPERATING CO	ESPERANZA "22" STATE COM 001	11837	3242	581	2661	362	2800
3001521263	BEPCO LP	STATE 22 COM 001	11760	3300	565	2735	394	2906
3001532415	MEWBOURNE OIL CO	ESPERANZA 14 STATE 001	11870	3244	581	2663	360	2884
3001532938	PURVIS OPERATING CO	ESPERANZA 22 STATE COM 001	11850	3242	545	2697	344	2898
API	Footage	Township & Range	Section	Marker Zone	Marker MSL	Top 7R/Capitan	7R/Capitan MSL	
3001532647	1830 FNL	21S -27E	14	580	2685	802	2463	
3001531877	2232 FSL	21S -27E	15	578	2724	784	2518	
3001532718	660 FNL	21S -27E	15	670	2650	853	2467	
3001521167	1980 FNL	21S -27E	15	559	2755	793	2521	
3001522055	1268 FSL	21S -27E	15	544	2737	HIR	---	
3001501101	1980 FSL	21S -27E	15	530	2739	841	2428	
3001521492	1650 FNL	21S -27E	15	630	2685	832	2483	
3001532938	1775 FSL	21S -27E	15	542	2700	804	2438	
3001521263	660 FNL	21S -27E	15	545	2755	814	2486	
3001532415	685 FSL	21S -27E	22	560	2684	802	2442	
3001532938	1775 FSL	21S -27E	22	544	2698	805	2437	

Fig. 7 Well log identification and e-log tops correlated

Fig. 7 Well log identification and e-log tops correlated

Mesquite SWD, Inc.

Water Wells in Two + Mile Radius of Exxon State No. 8



Data source: NM Office State Engineer
Waters Database June 12, 2008

- Exxon State #8 SWD
- Water Well
- Dry Exploratory Water
- Livestock Water Well
- Plugged Oil Drilling Supply Well

Note: Water wells are present to the south and west of the Section 28 well, especially in Sections 19, 30, and 31.

GeoScience Technologies
Kay Havenor, Ph.D., RPG
Roswell, New Mexico
June 14, 2008

CONCURRENCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Southwestern New Mexico

T. Andy	70	T. Carson	T. Ojo Alamo	T. Penn. "P"
T. Salt	116	T. Stevens	T. Pictorial-Fruitland	T. Penn. "C"
T. B. Salt	116	T. Asa	T. Pictorial Cliffs	T. Penn. "C"
T. Yates	684	T. Hiss	T. Cliff House	T. Leadville
T. T. Rivers	684	T. Devorian	T. Monette	T. Madison
T. Queen	684	T. Sirian	T. Point Lookout	T. Elbert
T. Graham		T. Moraya	T. Mancos	T. McCracken
T. San Andres		T. Simpson	T. Gallup	T. Ignacio Ozate
T. Glaciers		T. Mikes	T. Big Greenhorn	T. Granite
T. Paddock		T. Litchburg	T. Dakota	
T. Electricity		T. Gr. Wash	T. Morrison	
T. Tuzigoot		T. Granite	T. Tondito	
T. Delank		T. Dolanore Sand	T. Escalade	
T. Abo		T. Dove Springs	T. Wingate	
T. Wetcamp			T. Chino	
T. Penn.			T. Permian	
T. Penn. (Dodge C)			T. Penn. "A"	

SAJ02 80 50:75 SV9 80 :10

[illegible]

5

1. *Introduction*

REPORTAIT WATER SANDS

conclude down on rate of water it flow and elevation to which water rose in hole.

include data on rate of water inflow and elevation to which water rose in hole.

10-20-77	PUT 110 GALLONS OF OIL IN WELL
10-20-77	WELL TAKING WATER UNDER PRESSURE
9-20-77	STARTED WATER IN J

1941

(x x x x x x x) i s t e p s b o d y u n c l e m a c

From	To	Thickness in Feet	Description	From	To	Thickness in Feet	Description
0	40		lt sd	250	320		dolo and anh
40	75		gyp-rb	320	338		dolo 15 brn
75	90		dolo + anh, hard gyp	338	350		sand top Yates
80	85		dolo + gyp, rb	350	354		dolo
85	95		anh gyp rd bd	354	385		sand
95	100		anh gyp rd bd	385	410		dolo
100	100		anh grap	410	439		sand
110	125		gray shn	439	488		dolo
130	130		gray tan, brn clay	488	491		sand
130	145		lt gray anh	491	525		dolo
145	155		anh some rd gyp + sd	525	530		dolo and green shale
155	165		hard anh 8" pipe at 170/	530	551		dolo some green shale
165	170		110 sx amt	551	556		sand
170	200		lite limy anh	556	562		dolo, porous, oil saturated
200	210		brn dolo (shale brk at 205)	562	568		dolo, sect 5" csg/110 sax
210	235		gray dolo, hard	568	651		dolo
235	237		El sdy shale	651	654		sand
237	243		hard-lt brn dolo	654	684		sand
243	250		dolo and shale brks, fn sdy	684	694		dolo porous TD

IMPORTANT WATER SANDS

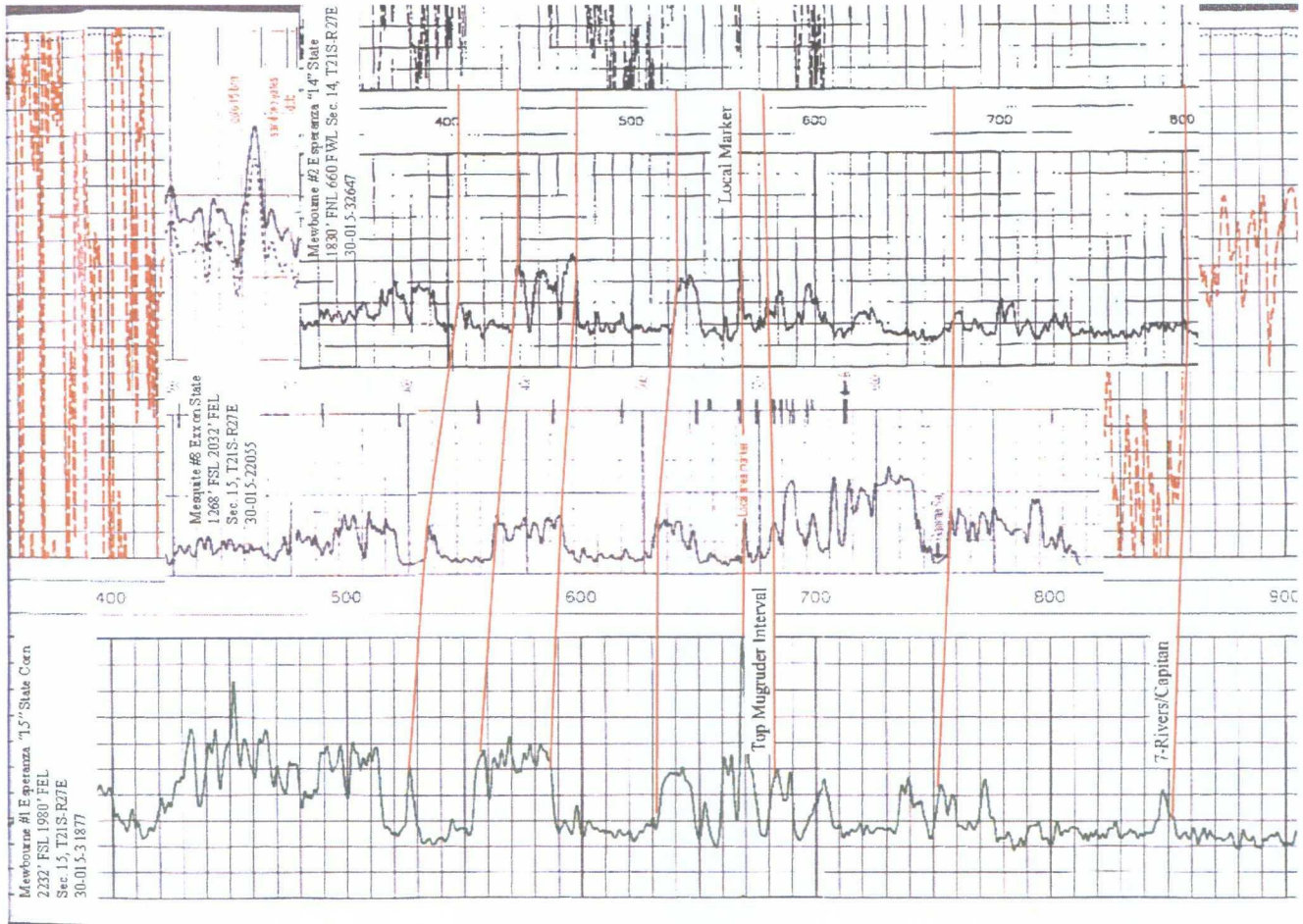
Include data on rate of water inflow and elevation to which water rose in hole.

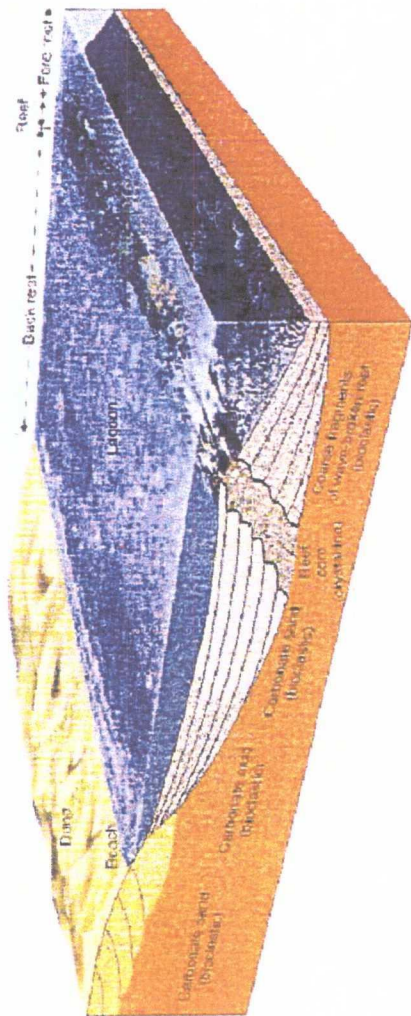
~~PUT 110 GALLONS OF RAIL IN WELL~~
~~WELL TAKING UNLATER UNDER~~
~~STARTED WATER IN J~~
~~9-20-77~~

to feet
 FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	40		rb-sd	250	320		dolo and anh
40	75		gyp-rb	320	338		dolo 15 brn
75	90		dolo + anhy, hard gray	338	350		sand top Yates
90	95		dolo + gyp, rb	350	354		dolo
95	95		anh gyp rd bd	354	385		sand
95	100		anh gyp rd bd	385	410		dolo
100	110		anh gyp	410	439		sand
110	125		gray anhy	439	488		dolo
125	130		gray han, brn clay	488	491		sand
130	145		lt gray anh	491	525		dolo
145	155		anh some rd gyp + sd	525	530		dolo and green shale
155	170		hard anh 8" pipe at 170/ 110 ex amt	530	551		dolo some green shale
170	200		lite limy anh	551	556		sand
200	210		brn dolo (shale brk at 205)	556	562		dolo, porous, oil saturat
210	235		gray dolo, hard	562	568		dolo, set 5" csg/110 sax
235	237		Bl sdy shale	568	651		dolo
237	243		hard lt brn dolo	651	654		dolo
243	250		dolo and shale brks. in sdy 684	654	684		dolo
				684	694		dolo porous TD

Fig. 4 Copy of Magruder #8 Exxon State driller log.





Reefs are normally relatively close to land, or at least in shallow marine waters. This is a common type of deposition and shows the relationship of various rock types that give us data to reconstruct the geological sequence of events.

Reef Illustration

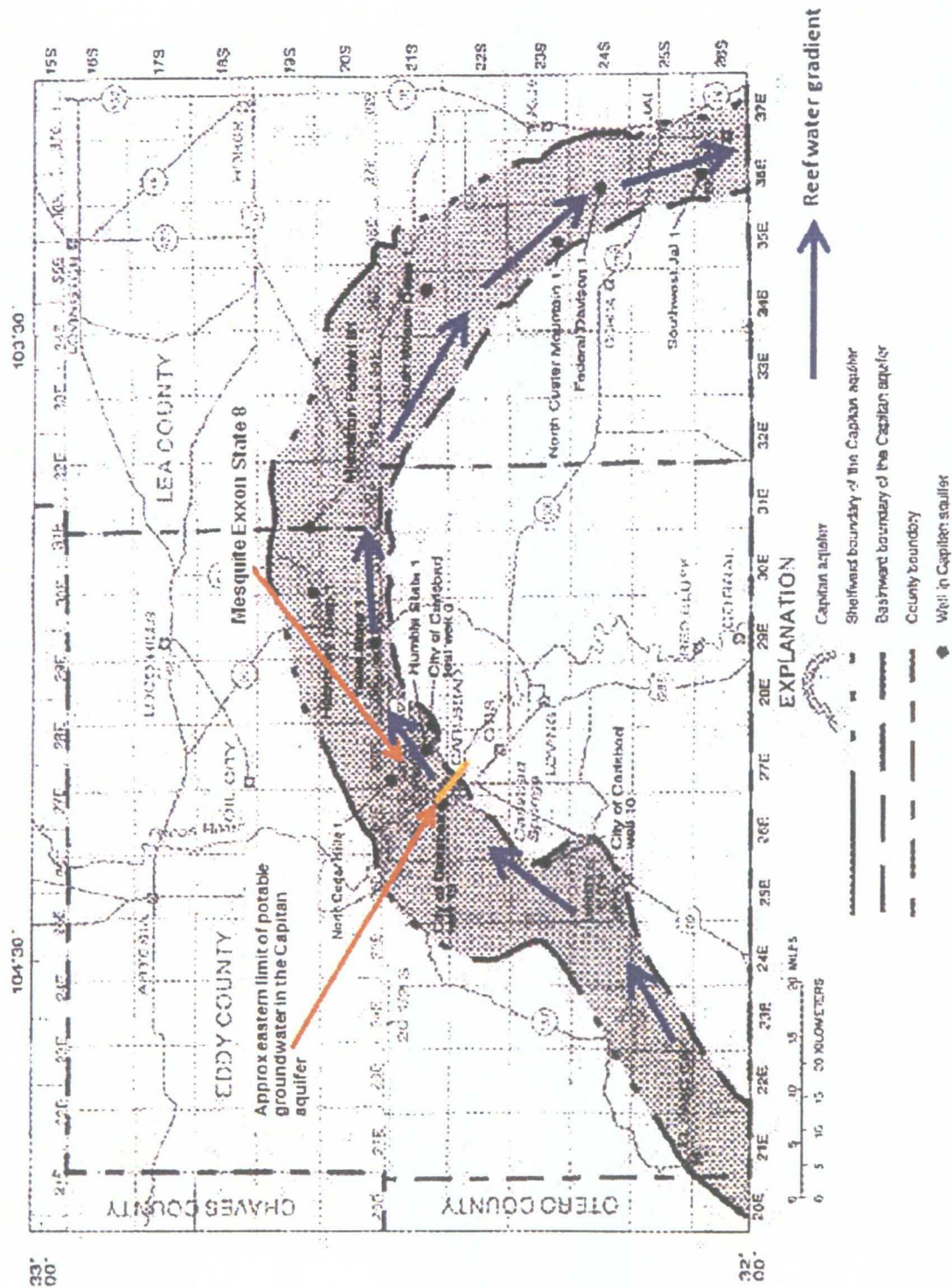


Figure 4.--Location of wells in the Capitan aquifer observation-well network as described by Hiss (1973).

Notes on annotated reef diagram.

Huff, G. F., 1997, Summary of available hydrogeologic data collected between 1973 and 1995 and information on permeability data and aquifer tests for the Capitan aquifer, Eddy and Lea Counties, New Mexico, USGS Open-File Report 97-370, prepared in cooperation with the New Mexico State Engineer Office

The annotated map is Figure 4, page 6, of the Huff report. The outline of the Capitan reef is that of Hiss (1973). Huff compiled water data from Hiss (1973; 1976) and Richey, et al (1985). The gradient values used to determine groundwater directions (blue arrows) is that from nine (9) wells measured by Richey, et al (1985) and incorporated in Huff's report.

Huff states that the Hiss and Richey data is all that is available relative to water-level data for the Capitan reef complex. Huff's introduction makes an important hydrogeological disclaimer (not literally stated as such) on page 1 (emphasis added by me),

The Capitan Reef complex is composed of the Capitan and Goat Seep Limestones and most or all of the Carlsbad facies of the Artesia Group (Meissner, 1972), including the Grayburg, Queen, Seven Rivers, Yates, and Tansil Formations (Richey and others, 1985). The Capitan Reef complex functions as a single geohydrologic unit and is collectively called the Capitan aquifer (Hiss, 1973; 1976).

Huff only collect available data. No interpretations were presented.

The problem with this data, in my opinion, is that measuring water levels within one formation provides comparable information. Measuring water levels from different formations - most of which have no hydraulic connectivity - cannot infer or demonstrate the flow direction, source, or anything other than the individual formations contain groundwater. Unfortunately, hydrologists commonly claim this is an acceptable practice to demonstrate groundwater flow. This is pointed-out by Mazor, 1977, p. 118, Fig. 6-13, shown below.

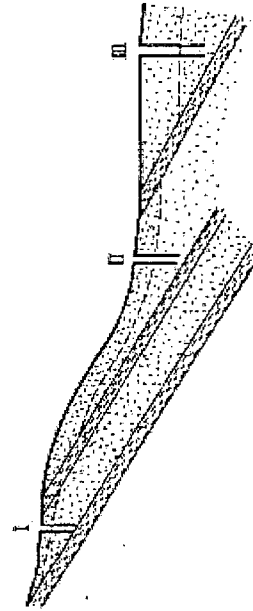


Fig. 6.13 Three wells with water tables similar to those seen in Fig. 6.12 but separated by aquicludes. They have no hydrological connections in spite of the apparent water table gradient.

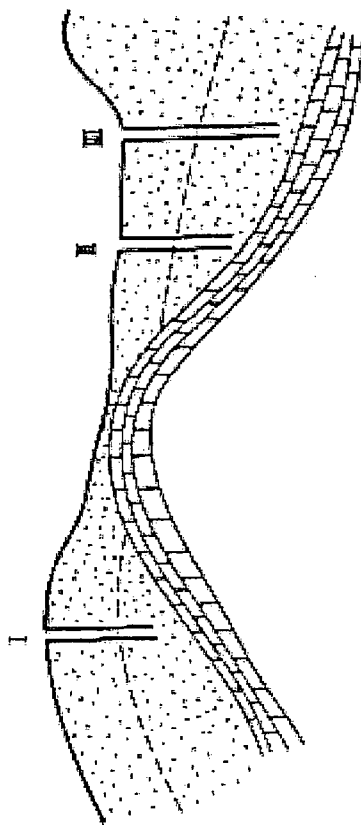


Fig. 6.14 Three wells with an apparent water table gradient of well I > well II > well III. However, a concealed folded structure isolates well I from wells II and III.

Mazor, E., 1997, Chemical and isotopic groundwater hydrology, Marcel Dekker, Inc., New York, 413 p.

An example of the Fig. 6.13 in the Huff report of Capitan water is the North Cedar Hills #1. That water level is 3084 ft msl (in Richey, 1985) compared to the 2000 measurement in the Exxon State #7 of 3060 ft msl. Sounds reasonable, but the TD of the open hole in the Exxon State #7 was 580 ft, whereas the bottom of the tested interval in the North Cedar Hills #1 was 1,014 ft (Huff, 1997, Table 6, p. 36, compiled from Hiss, 1976).

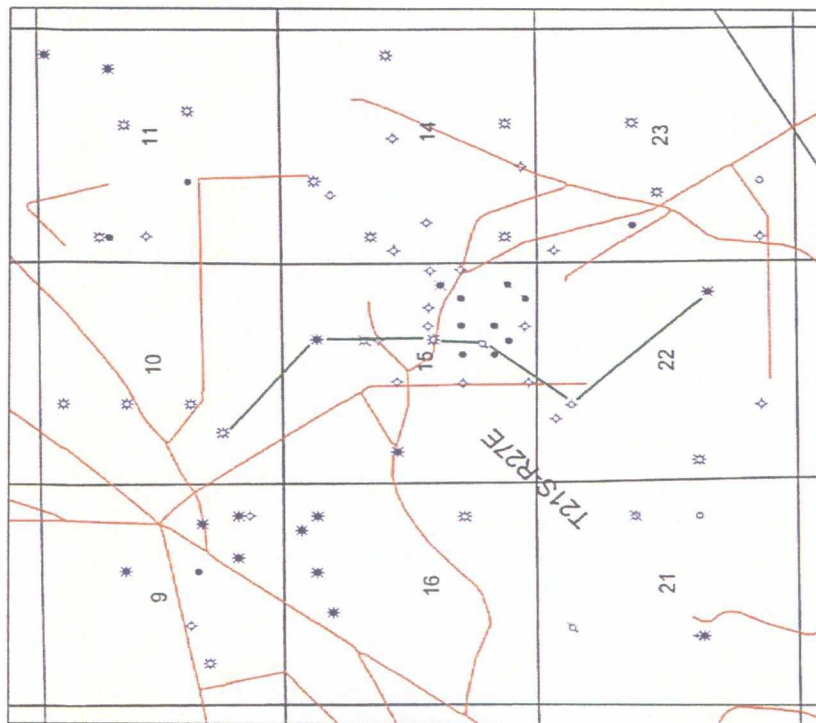
The point is that the water level (WL) in Exxon State #7 *appears* as reasonable for Capitan "reef" if compared to the North Cedar Hills #1. However, the open-hole in the #1 is 434 ft deeper! The top of the Seven River Fm in the North Cedar Hills #1 appears on logs to be at 712' +2567' - and the projected Seven Rivers in the Exxon State #7 would be about +2484' msl, 83' lower. This translates as comparing a water level in the Exxon State #7 coming from +2704' msl (Yates) with the Cedar Hills #1 at +2265' msl (Seven Rivers), from a different zone that is actually about 209' lower than the Exxon State #7. Mazor's Fig. 6.13 certainly applies here.

My favorite quote from Mazor, p. 117, is:

... one can never deduce flow directions from water levels alone.

Hydrologists hate that, but it is so true.

Mesquite SWD, Inc.
Cross-Section T21S-R27E, Eddy County, NM



Map source: USGS topo NAD27 base
 DeLorme XMap 4.0



Line of Cross-Section

- Lease access road
- Water Disposal well
- Oil well
- * Gas well
- * Gas - Oil well
- Abandoned Gas well
- * Abandoned Gas well
- * Abandoned Oil/Gas well
- ◇ Dry hole

GeoScience Technologies
Kay Havenor, Ph.D., RPG
Roswell, New Mexico
September 10, 2008

North - South Cross-Section Back-reef Facies of Capitan Reef Complex

N
Unit Petroleum Co
Yates State #2
Sec 10, T21S-R27E
TD 11467
30-015-32801

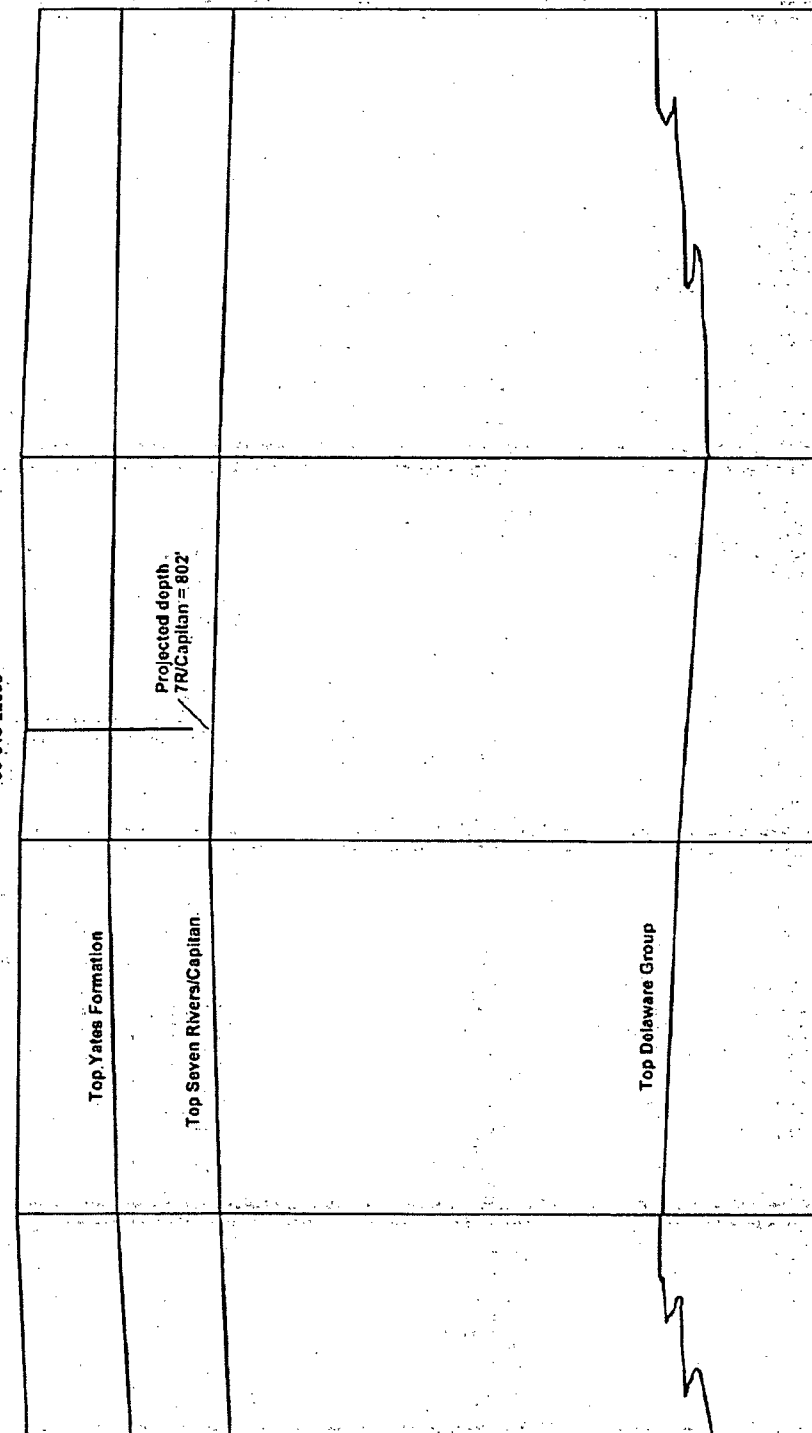
Newbourne Oil Co
Esperanza 15 State Com #2
Sec 15, T21S-R27E
TD 11835
30-015-32716

Newbourne Oil Co
Esperanza State Com #1
TD 11835
Sec 15, T21S-R27E
TD 684
30-015-31877

Mesquite SWD, Inc.
Exxon State #8
Sec 15, T21S-R27E
TD 11760
30-015-22055

BEP CO, LP
State 22 Com #1
Sec 22, T21S-R27E
TD 11760
30-015-22163

S
Purvis Operating Co
Esperanza State Com #2
Sec 22, T21S-R27E
TD 9365
30-015-32838



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Kay Havenor, Ph.D., RPG
Roswell, New Mexico
September 11, 2008

Figure 3 North - South back-reef cross-section

Hiss Description of Capitan Reef

- The Capitan aquifer is underlain by sandstones, siltstones, and limestones of the Delaware Mountain Group and is overlain by the Artesia Group and the Salado Formation. It is bounded on the basinward side by impermeable anhydrite of the Castile Formation and grades shelfward into the interbedded dolomite, limestone, sandstone, and anhydrite of the Artesia Group and San Andres Limestone. The basinward edge of the Capitan aquifer is abrupt and can be sharply defined, whereas the shelfward edge is gradational and cannot be easily defined (fig. 4).

Hiss Description of Capitan Reef

(cont.)

- *The rock units surrounding the Capitan aquifer generally have significantly less permeability than the Capitan and, in most places, act as partial hydrologic barriers to movement of water into or out of the aquifer.*

TDS Concentrations

- City of Carlsbad Test Well No. 3 - located in Capitán Reef Aquifer - TDS 23,800 mg/l
- Humble State No. 1 - TDS 28,000 mg/l
- Exxon State Nos. 1 and 2 - TDS 98,600 mg/l
- Exxon State Nos. 7 and 3 - TDS 114,000 mg/l
- Exxon State No. 8 - TDS 79,800 mg/l

Conclusions based on TDS Concentrations

- **Water is not protected under 19.15.9.701(E)(2) NMAC because TDS levels exceed 10,000 mg/l**
- **No vertical hydraulic conductivity between the wells**

Conclusions

- Water from the Exxon State No. 8 is not vertically hydraulically connected to the surrounding wells and cannot reach Capitan Reef aquifer due to the impermeability of the back reef.
- There is no water with a TDS concentration of less than 10,000 mg/l in the vicinity of the Exxon State No. 8.
- Approving Mesquite's application to use the Exxon State No. 8 to dispose of salt water at a depth of 694 feet would not endanger protected or unprotected water.



INJECTION PROFILE TEMPERATURE LOG

Company Mesquite S.W.D., Inc.

Well Exxon State No. 8

Field N/A

County Eddy

State New Mexico

Location Unit Letter "O"

Section 15 Township 21S Range 27E

Permanent Datum Ground Level Elevation 114
Log Measured From Ground Level
Casing Measured From 114

Date 05 - March - 2008

Run Number One

Depth Culler 884 ft

Depth Logger 882 ft

Bottom Logged Interval 880 ft

Top Log Interval 25 ft

Casing Hole Size 114

Line Fluid Water / Air

Cement Plug / Cement

Max. Recorded Temp 114

Estimated Cement Top 114

Time Well Ready 03A

Time Logger on Bottom Sea Log

Equipment Number WEL - 0002

Location Hobbs, NM

Recorded By Danny Clayton

Witnessed By Air Clay Wilson

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Company Mesquite S.W.D., Inc.
Well Exxon State No. 8
Field N/A
County Eddy
State New Mexico
Location Unit Letter "O"

Section 15 Township 21S Range 27E

Permanent Datum Ground Level Elevation 114

Log Measured From Ground Level

Casing Measured From 114

Date 05 - March - 2008

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Bottom Logged Interval 880 ft

Top Log Interval 25 ft

Casing Hole Size 114

Line Fluid Water / Air

Cement Plug / Cement

Max. Recorded Temp 114

Estimated Cement Top 114

Time Well Ready 03A

Time Logger on Bottom Sea Log

Equipment Number WEL - 0002

Location Hobbs, NM

Recorded By Danny Clayton

Witnessed By Air Clay Wilson

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Bar Number

Casing Record
Surface String
First String
Production String
Line

Size

5.000 in.

200 ft

Top

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

563 ft

Bottom

Surface

interpretations
any interpretation, and we agree, except in the case of gross or willful negligence on our part, be liable to responsible for any loss, costs, damages
expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are
also subject to our general terms and conditions set out in our current Price Schedule.

Comments

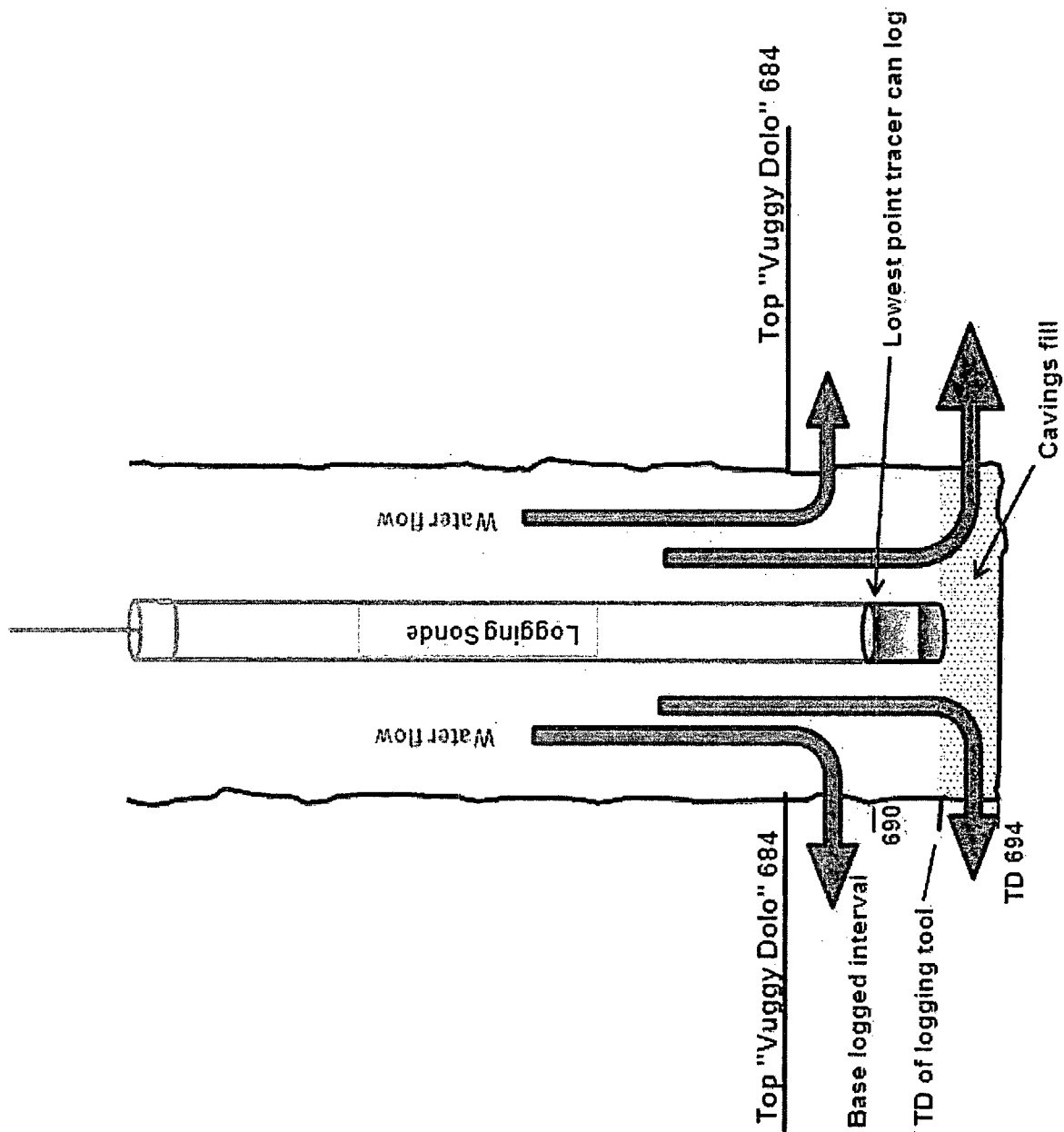
Injection profile indicates fluid going in open hole just below casing with majority going
down hole past TD.

Tracer pass show fluid movement down hole past logged TD.
Temperature show cooling effect just below casing to TD.

Thank you for using Black Warrior Wireline.

Station	Depth (ft)	Schedule	Description	Len (ft)	CPD (ft)	Wd (ft)
CHD	43.67		CHD 0%	5.84	0.68	1.00
			TRACER-Belt 775 (775-001)	2.00	1.44	5.00
			TRACER-Belt 10 (710-002)	3.00	1.44	5.00
LIET SEAR	36.33 37.63			5.00	1.00	50.00
SEAR	32.63			7.00	1.00	50.00
SEAR	25.63			7.00	1.00	50.00
SEAR	18.63			7.00	1.00	50.00
				7.00	1.00	50.00

Diagram of water flow down-hole and into the disposal zone past the logging sonde



Diagrammatic Subsurface Relationship **Relationships of Surface, Top of Magruder, Casing and Total Depths** Section 15 to 14, T21S-R27E, Eddy Co., NM

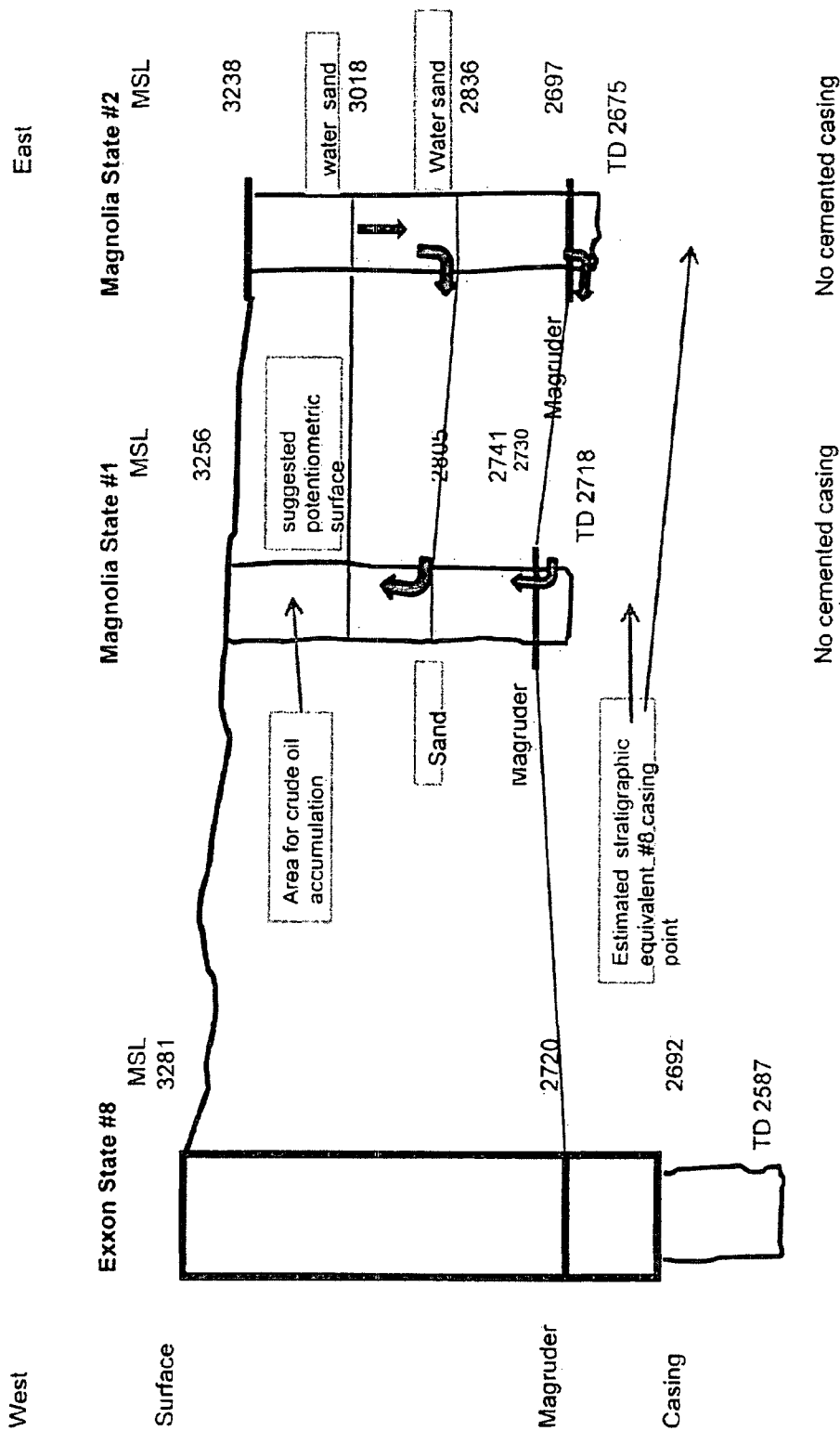


Diagram illustrates the stratigraphic relationship of subject wells with regard to cemented casing in Exxon State #8. Also shown are potential flow paths from Magnolia #2 to #1

GeoScience Technologies
 Kay Havenor, PhD
 Oct. 10, 2008