

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Thursday, September 11, 2008 2:03 PM
To: DHoward@claytonwilliams.com
Cc: Price, Wayne, EMNRD; VonGonten, Glenn, EMNRD; 'Reed, Timothy'; Bratcher, Mike, EMNRD
Subject: RE: SWR, North Hackberry Yates, Unit #108 Groundwater Notification

Dear Ms. Howard:

The New Mexico Oil Conservation Division (NMOCD) reviewed the Groundwater Notification for the above reference site. The source of the contamination at the site is not conclusive. At this time, this site does not fall under Rule 19. Therefore, the NMOCD hereby approves the plugging of the groundwater monitoring well at the above referenced site. The material used to plug the wells must be a cement grout with 1% to 3% bentonite. Please submit a final plugging report to the NMOCD within 60 days of receipt of this email.

Please be advised that NMOCD approval of the well plugging does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

From: Price, Wayne, EMNRD
Sent: Friday, April 18, 2008 4:00 PM
To: Hansen, Edward J., EMNRD; VonGonten, Glenn, EMNRD
Subject: FW: SWR, North Hackberry Yates, Unit #108 Groundwater Notification

Please follow up on.

From: Tim Reed [mailto:treed@hec-enviro.com]
Sent: Friday, April 18, 2008 1:50 PM
To: Price, Wayne, EMNRD
Cc: Howard, Dawn
Subject: FW: SWR, North Hackberry Yates, Unit #108 Groundwater Notification

April 18, 2008

Wayne:

Thank you for your call back yesterday. I know that things have been very busy for you. As you requested, here is the original email. If you would like for me to forward to Ed Hansen, please let me know. To refresh your memory, this site was an old pit location that Southwest Royalties inherited and closed under an Agreed Compliance Order. If you have any questions or require any additional information, please call or email me.

9/11/2008

Thank you for your attention in this matter.

Tim Reed, P.G.
Vice President
Highlander Environmental Corp.
office - (432) 682-4559
fax - (432) 682-3946
cell - (432) 557-4680

-----Original Message-----

From: Tim Reed [mailto:treed@hec-enviro.com]
Sent: Friday, March 14, 2008 4:27 PM
To: wayne.price@state.nm.us
Cc: Mike.Bratcher@state.nm.us; Howard, Dawn; 'itavarez@hec-enviro.com'
Subject: SWR, North Hackberry Yates, Unit #108 Groundwater Notification

March 14, 2008

Wayne Price
Environmental Bureau Chief
NMOCD
Santa Fe, New Mexico

Mr. Price:

Thank you for your time earlier today to discuss the Groundwater Notification on the Southwest Royalties, N. Hackberry Yates #108, located in Unit L, Section 24, T-19-S, R-30-E, Eddy County, New Mexico. As you can see on the attached topographic extracts, this site is in the potash mine area. As we discussed, one monitor well was recently drilled at this site as part of a pit closure.

The monitor well was sampled and the attached laboratory analysis shows a chloride concentration of 17,400 mg/L. In examining the geology of the area, it was noted that this site is at or near the edge of the Rustler Formation outcrop. Rustler water in this area has been historically reported to be non-potable and generally unfit for livestock (New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 3). The monitor well was drilled to a total depth of 65' with water encountered at approximately 50' below ground surface.

The NM WAIDS database, shows a Rustler water supply well for secondary recovery purposes in the same section (Section 24-19S-30E) as the monitor well. A sample analysis from 1966 indicated a chloride concentration of 23,270 mg/L. It would appear that from the proximity of the Rustler to the site and the comparable groundwater qualities, that the monitor well is likely completed in the Rustler formation.

Please review the attached information at your earliest convenience to see if you concur.

Thank you for your assistance in this matter.

9/11/2008

Tim Reed, P.G.
Vice President
Highlander Environmental Corp.
office - (432) 682-4559
fax - (432) 682-3946
cell - (432) 557-4680

This inbound email has been scanned by the MessageLabs Email Security System.

9/11/2008

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: March 10, 2008

Work Order: 8022608



Project Location: Tank Battery (Pit Area)
Project Name: SWR/North Hackberry Yates
Project Number: 2979

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
151664	MW-1	water	2008-02-21	11:10	2008-02-25

Sample: 151664 - MW-1

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		98.0	mg/L as CaCo3	4.00
Total Alkalinity		98.0	mg/L as CaCo3	4.00
Dissolved Calcium		2420	mg/L	0.500
Dissolved Potassium		2050	mg/L	0.500
Dissolved Magnesium		1100	mg/L	0.500
Dissolved Sodium		10300	mg/L	1.00
Chloride		17400	mg/L	0.500
Fluoride		<1.00	mg/L	0.200
Sulfate		1270	mg/L	1.00
Nitrate-N		4.35	mg/L	0.200
pH		7.29	s.u.	0.00
Total Dissolved Solids		37350	mg/L	10.00

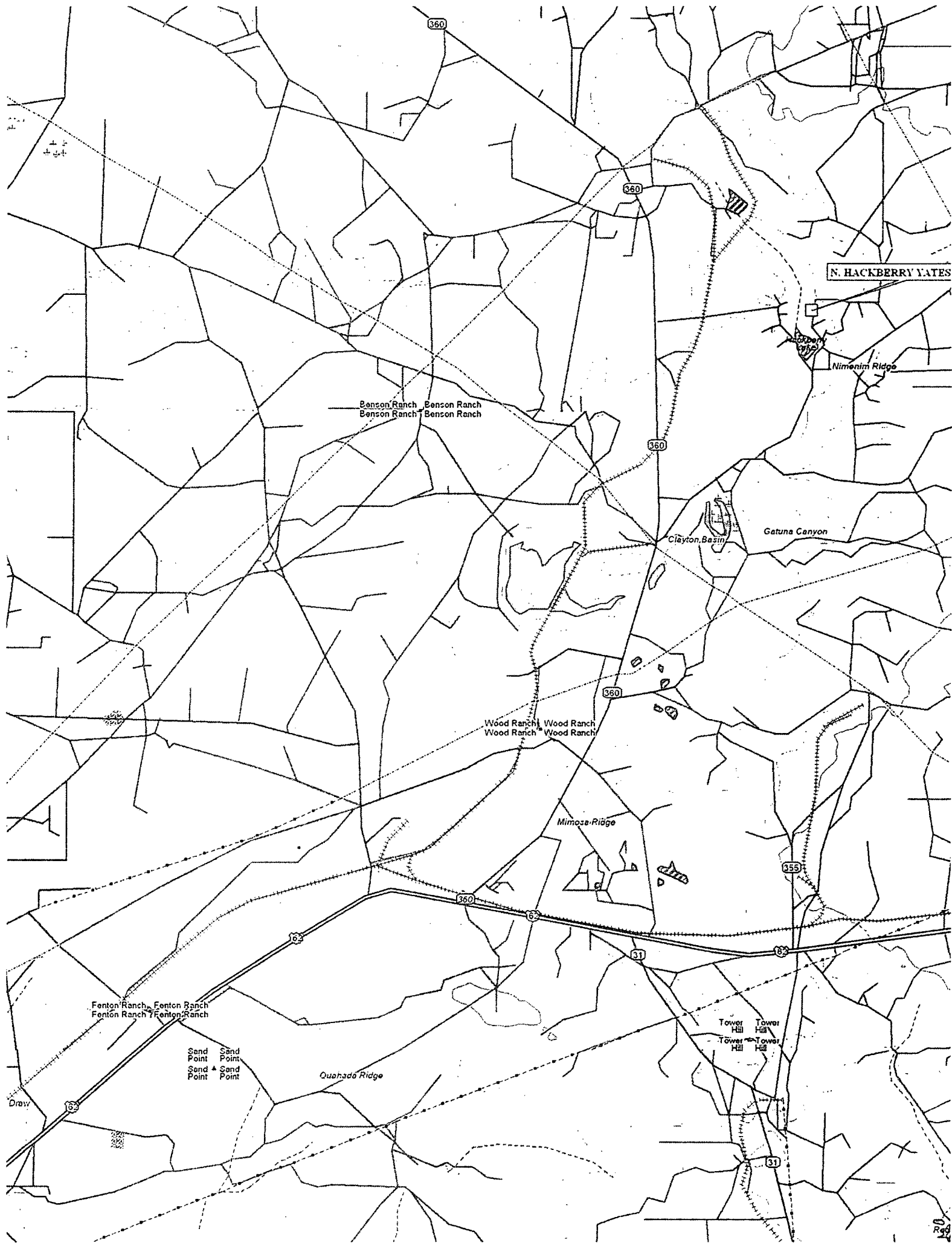
NM WAIDS

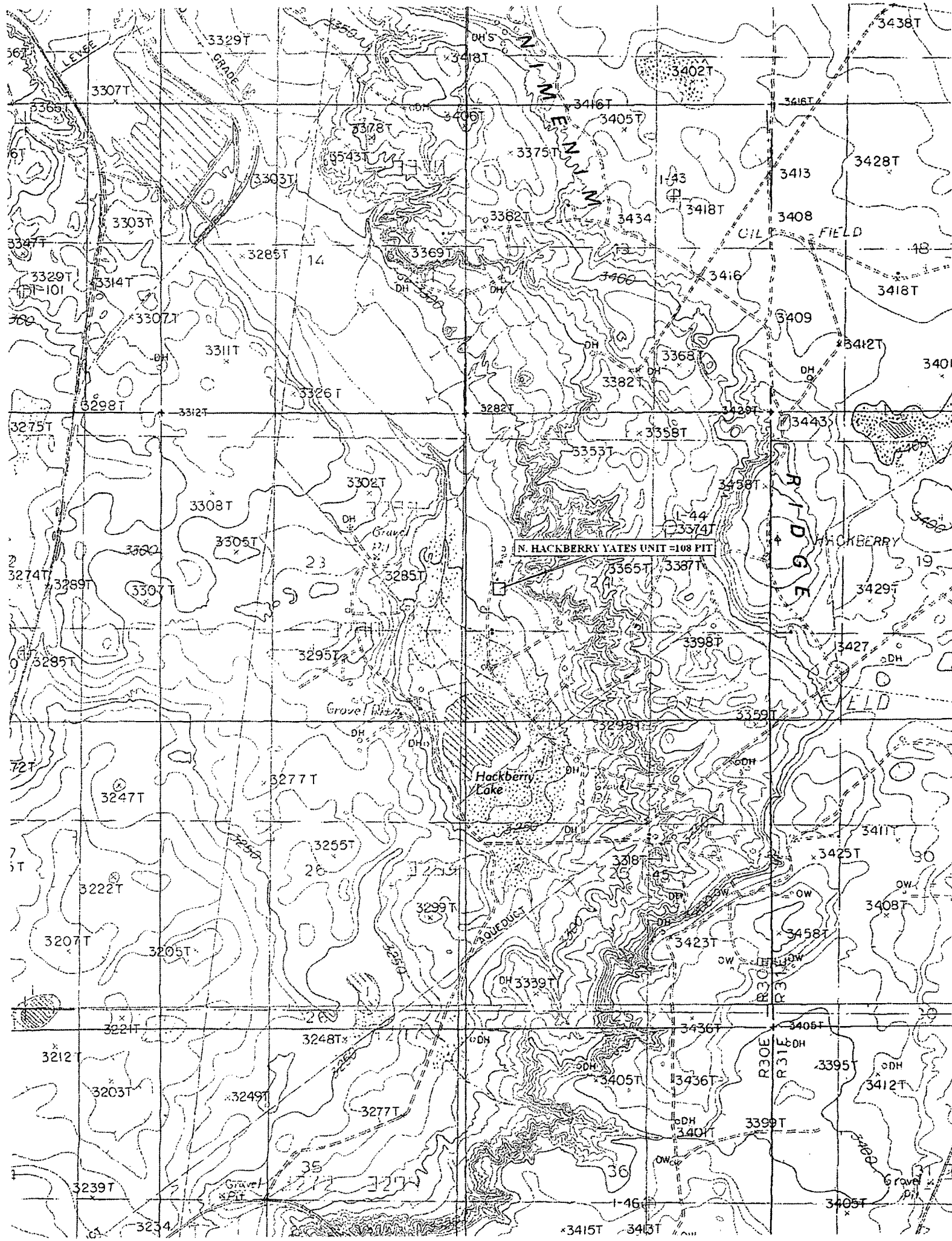
[DATA](#)[MAPS](#)[HOME](#)[SCALE](#)[CORROSION](#)

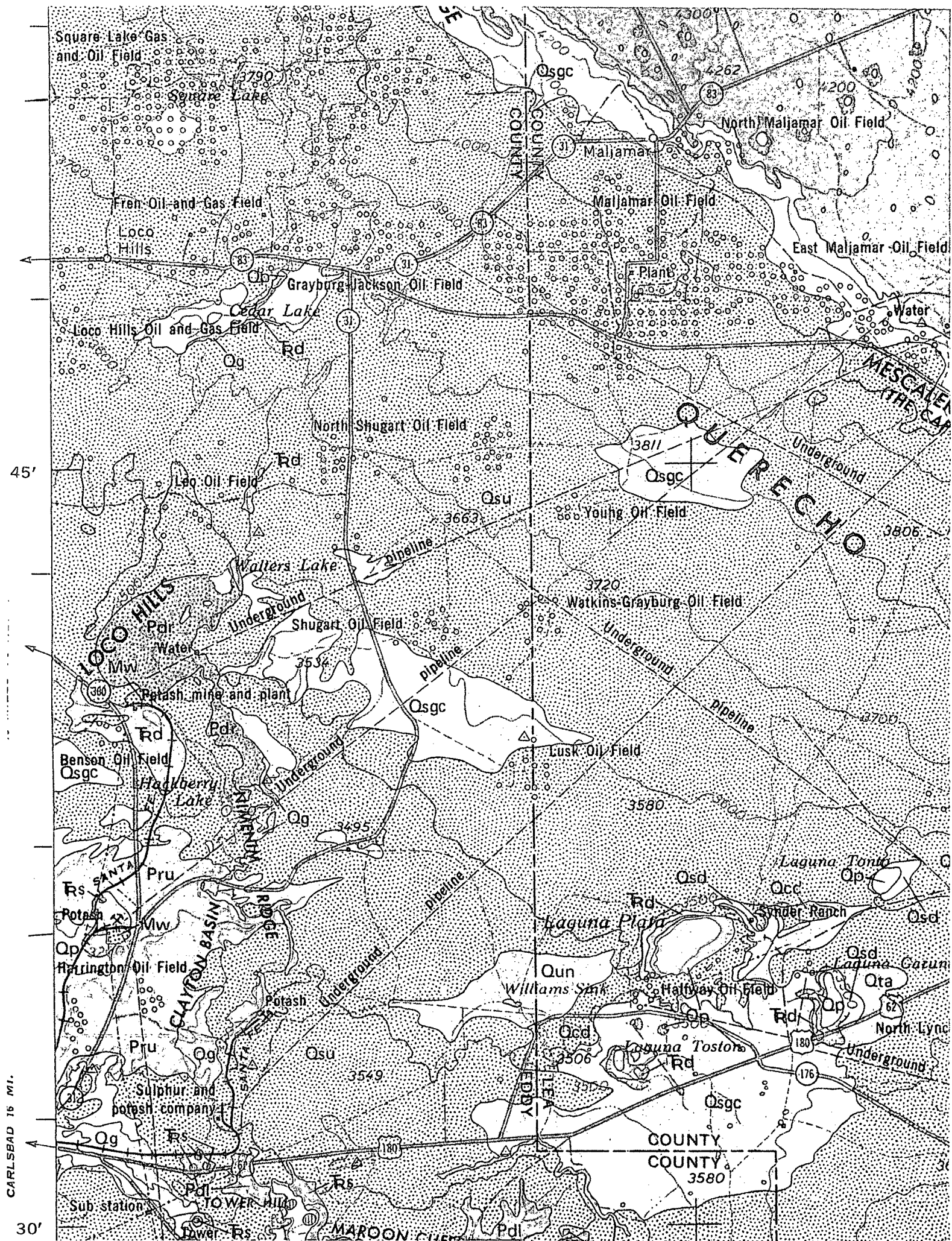
General Information About: Sample 27785

Section/ Township/Range	24 / 19 S / 30 E	Lat/Long	32.6458 / -103.9252
Elevation	0	Depth	0
Date Collected	4/1/1966	Chlorides	23270
Collector / Point of Collection	DLR / BLR300	Use	Secondary Recovery of Oil
Formation	RSLR	TDS	0









T _{RC}	T _{RD}
T _{RS}	

Santa Rosa Sandstone, Chinle Formation, and Dockum Group undivided

In New Mexico, Chinle Formation, T_{RC}, in eastern part, Santa Rosa Sandstone, T_{RS}, in western part, and Dockum Group undivided, T_{RD}, in southern part as well as in Texas Chinle Formation, T_{RC}, claystone, micaceous, greenish, red with reduction spots, interbedded with sandstone, fine grained, in thin beds; thickness up to 300 feet
 Santa Rosa Sandstone, T_{RS}, mostly crossbedded sandstone, conglomerate, some clay, claystone, and siltstone, pale red to reddish brown; thickness 50 to 70 feet
 Dockum Group undivided, T_{RD}, shale, sandstone, siltstone, limestone, and gravel; mostly shale, micaceous, thin bedded, variegated; thickness up to 300 feet

TRIASSIC

Pdr	Pdl
	Pru

Dewey Lake Redbeds and Rustler Formation

Dewey Lake Redbeds, Pdl, Rustler Formation, Pru, and Dewey Lake Redbeds and Rustler Formation undivided, Pdr
 Dewey Lake Redbeds, Pdl, siltstone and fine-grained quartz sandstone, laminated, locally crossbedded, reddish orange, reddish brown, brownish yellow, greenish-gray reduction spots up to an inch in size common; thickness 200 to 250 feet
 Rustler Formation, Pru, limestone, siltstone, sandstone, gypsum, marl, and clay. Upper part—limestone and dolomitic limestone; thickness 50+ feet. Middle part—siltstone and sandstone, yellowish gray; thickness 50 to 70 feet. Lower part—siltstone and fine-grained sandstone, thin to medium bedded, red, interbeds of earthy to sparry red gypsum, a few beds of red and greenish-gray marl and clay; thickness 50+ feet

PERMIAN

Ochoa



Diapiirs and collapse structures

Small circular structures in potash-mining area attributed to upward movement of salt, followed in some structures by solution and collapse

VIRGIL E. BARNES, PROJECT DIRECTOR

Geologic mapping in part from sources shown on index map. Geologic mapping field checked and compiled on high-altitude aerial photographs by G. K. Eifler, Jr., and C. C. Reeves, Jr., for Texas and New Mexico, respectively. Geologic mapping in New Mexico in cooperation with New Mexico Bureau of Mines and Mineral Resources, Frank E. Kottowski, Director. Map scribed by R. L. Dillon. Mapping reviewed by West Texas Geological Society, Geologic Atlas Committee, D. M. Norman (Markay Oil & Gas Company), Chairman, Clifford H. Sherrod, Jr. (Consulting Geologist), and Thomas J. Hansen (Marshall & Winston Inc.)

NM WAIDS

DATA

MAPS

HOME

SCALE

CORROSION

Water Samples for Township 19 South Range 30 East

Instructions:

The number represents the number of water samples of certain well. Click the number if you want to download the data.

14 records are available.

	# of samples	S	T	R	Formation	Date	Chlorides (mg/L)	Location (qtr/qtr)
<input type="checkbox"/>	1 sample	10	19S	30E	RSLR	3/27/1967	124000	19S.30E.10.31312
<input type="checkbox"/>	1 sample	24	19S	30E	RSLR	4/1/1966	23270	19S.30E.24.134133
<input type="checkbox"/>	1 sample	24	19S	30E	RSLR	4/1/1968	23560	19S.30E.24.134133
<input type="checkbox"/>	1 sample	24	19S	30E	RSLR	4/1/1968	24000	19S.30E.24.134133
<input type="checkbox"/>	1 sample	25	19S	30E	OAL	3/14/1985	181	19S.30E.25.12133
<input type="checkbox"/>	1 sample	28	19S	30E	null	5/15/1980	76	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	null	11/3/1978	92	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	null	11/17/1977	99	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	null	6/6/1979	99	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	null	5/15/1978	103	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	CHINLE	11/1/1979	106	19S.30E.28.334332
<input type="checkbox"/>	1 sample	28	19S	30E	RSLR	10/12/1984	108	19S.30E.28.31333
<input type="checkbox"/>	1 sample	28	19S	30E	RSLR	10/29/1985	200	19S.30E.28.31333
<input type="checkbox"/>	1 sample	28	19S	30E	RSLR	5/15/1989	815	19S.30E.28.31333

☐ SELECT/DESELECT ALL

Submit

