NM1-57

Revised Permit Application

June 2014

Volume 4, Part 3 of 3: Siting and Hydrogeology

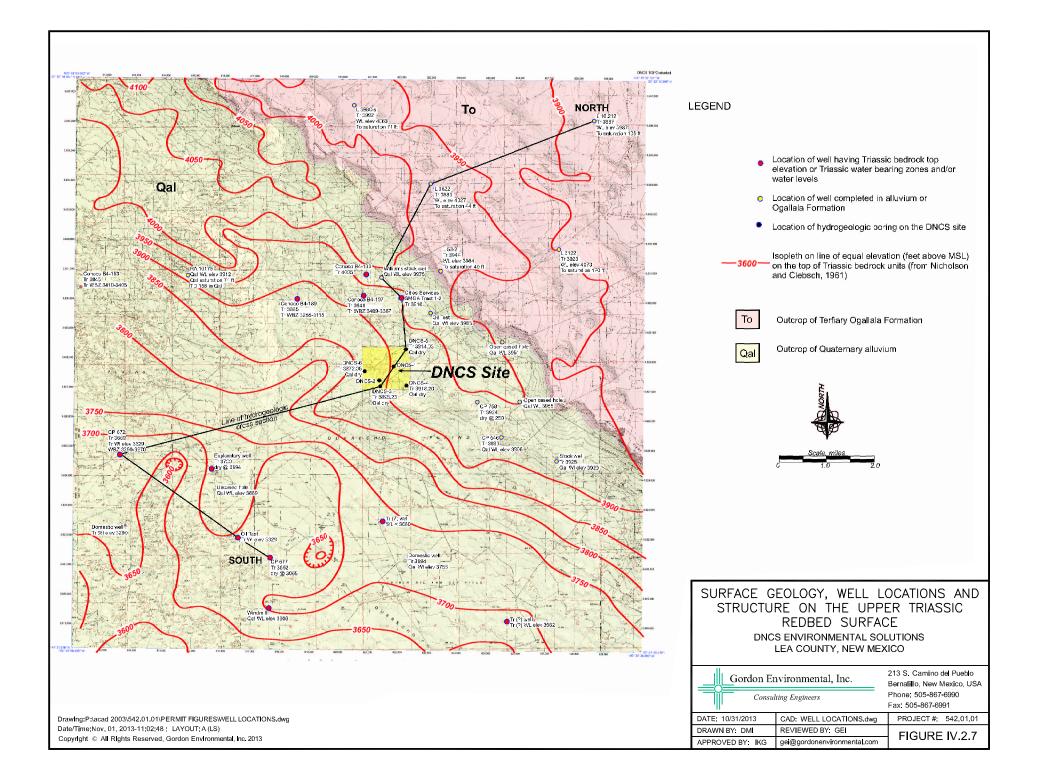


TABLE IV.2.4 Records of Wells in the Vicinity of the DNCS Site DNCS Environmental Solutions

Owner or OCD Designation	OSE Permit Number	Location PLS	Location Lat D.dddd	Location Long D.dddd	Use	LS Elev	TD	WL	WL Elev.	Date	WBZ	Top WBZ	Bottom WBZ	WBZ thickness	Trc top	Trc elev	Tsr	Driller Yield	Comments or source
Water Flood Assoc Inc: #2 Mal 2-127-2	L 03980	17.32.1.22233			flood	4251	270	200		3/6/1960	To/Qal	210	265	70	265	3986			OSE Well Record
Water Flood Assoc Inc: #2 Mal 2-127-2	L 03980-s	17.32.1.42213			SRO	4242	255	179	4063	9/21/1962	To/Qal	205	250	76	250	3992			OSE Well Record
Maljamar Repressuring Ag. #5	L 04019	17.32.2.43424			SROO	4195	182	126 est		6/6/1948	To/Qal	126	180		180	4015			OSE Well Record
Maljamar Repressuring Ag. #6	L 04020	17.32.1.43343			SROO	4195	200	100 est		6/2/1950	To/Qal	139	195		195	4000		100	OSE Well Record
Maljamar Repressuring Ag. #7	L 04021	17.32.2.44335			SROO	4203	190	160 est		6/14/1950	To/Qal	160	185		185	4018		100	OSE Well Record
Mescalero Ridge Water Coop	L 04021-s	17.32.3.23422			PS	4282	260	180 est		1/21/2002	To/Oal	180	260		257	4025			OSE Well Record
Chevron: Maliamar Gravburg Unit #12		17.32.3.4323334			OCD	4284	casing to 1	384. redbed	s to 990						150	4134			OCD Record
Chevron: Maljamar Grayburg Unit #14		17.32.3.44300			OCD	4285	casing to 1	275, redbed	s to 990						115? 2	90?			OCD Record
BE Pashall	L 04038	17.32.1.32343			com/dom	4225	225	175		3/3/1960	To/Qal	192	224	50	224	4001			OSE Well Record
Larry Wooton	No permit no	17.32.10.122			dom	4186	156	132		2/6/1959	To/Qal	132	156	24	156 est				OSE Well Record
George Kenemore	RA 8855	17.32.10.11421			dom	4153	158	dry		8/4/1994				0	157	3996			OSE Well Record
Maljamar Coop Repressuring Ag.	L 00051-2	17.32.11.23142			SROO	4142	140	NA		9/10/1947	To/Qal	NA	NA	0	131	4011		100	OSE Well Record
Conoco Pillips	No permit no	17.32.21.300			monitor	4009 est	125	dry		5/15/2007	To/Qal			0	TD in	To/Qal			OSE Well Record
Conoco Oil MCA Battery 4 #189		17.32.26.41000	32.803679	103.735041	OCD	3965	1024 Log,	cased to 10	62		Trc	710	850	0	80	3885			OCD Record 5/11/78
Flo CO2 Inc	RA 10175	17.32.28.12	32.81102	103.773641	dom	3999	158	87 est	3912	2/4/2002	To/Qal	87	124	71	TD in	To/Qal			OSE Well Record
Conoco Oil MCA Battery 4 #109		17.32.29.11000			OCD	3937	casing to 8	73							70	3867			OCD Record 5/11/78
Contoco Oil MCA Battery 4 #154		17.32.29.32000			OCD	3984	casing to 8	60							105	3879			OCD Record
Conoco Oil MCA Battery 4 #170		17.32.29.32000			OCD	3933	casing to 9	90							55	3878			OCD Record
Conoco Oil MCA Battery 4 #214		17.32.29.33000			OCD	4091	casing to 1	050							214	3877			OCD Record 5/11/78
Conoco Oil MCA Battery 4 #163		17.32.30.13000	32.807566	103.812556	OCD	3895	casing to 8	70, redbeds	to 675		Trc	575	580		50	3845			OCD Record 5/11/78
							anyhdrite 6	75-810			Pr	810	820						Rustler FM?
Conoco Oil MCA Battery 1 #218		17.32.30.33000			OCD		casing to 1	018, redbed	s to 590			545	590		50				OCD Record
Continental Oil Pearsall BX #2		17.32.34.241111			OCD	3952	casing to 3	515, redbed	s to 792						64	3888			OCD Record
Warton Drilling Co	L 03750	17.33.1.140			OWD	4150	180	150		12/21/1957	To/Qal	150	180	30					OSE Well Record
Denver Drilling Company	L 03782	17.33.2.444			OWD	4155	183	152		2/6/1958	To/Qal	151	183	31					OSE Well Record
Yates Petroleum	L 00010.212	17.33.2.44423	32.857521	103.626451	OWFR	4155	273	168	3987	7/7/1994	To/Qal	168	268	105	268	3887		120	OSE Well Record
Carper Co: Daya Operating State B No. 2	L 04935	17.33.2.120			OWD	4167	204	162		7/12/1962	To/Qal	162	201	42					OSE Well Record
Lomax Drilling Co	L 03012	17.33.3.140			Oil	4182	210	155		11/1/1955	To/Qal	186	198	55	198	3984			OSE Well Record
Conoco #2 Caprock 2-174-25	L 03528-s-3	17.33.3.1443			OWD	4183	271	155		12/12/1968	To/Qal	150	265	116	265	3918			OSE Well Record
Maljamar Coop #1 Maljamar 2-137-1	L 03528	17.33.4.44322			OWD	4179	265	158		12/11/1957	To/Qal	160	225	107	240	3939			OSE Well Record
Yucca Water Co	L 03598-x	17.33.5.22220			SR	4198	272	160		6/25/1959	To/Qal	160	260	112	260	3938			OSE Well Record
Yucca Water Co	L 03598	17.33.6.11110			SRO	4243	287	210		6/18/1962	To/Qal	230	280	77	280	3963			OSE Well Record
RE Paschall	L 04524	17.33.6.440			dom	4227	100	90		9/28/1960	To/Qal			10	1				OSE Well Record
Dual Drilling Co	L 04122	17.33.7.32322			OWD	4229	249	214		5/3/1959	To/Qal	214	249	35	247	3982			OSE Well Record
Kewanee Oil Co	L 02771	17.33.7.4000			PS	4217	227	182		6/28/1955	To/Qal	164	215	45	222	3995			OSE Well Record
Thunderbird Drilling Co	L 03749	17.33.9.342113			OWD	4195	230	160		12/19/1957	To/Qal	160	230	70					OSE Well Record
Continental Oil Company	L 03528-s-2	17.33.9.331432			SRO	4200	262	180		7/19/1967	To/Qal	198	262	82	252	3948			OSE Well Record
Potash Company of America: PCA No. 8	L 01880-s-3	17.33.12.14110			Min Dev	4148	268	155		5/4/1981	To/Qal	159	230	113	258	3890			OSE Well Record
Potash Company of America	L 01880-1884 comb	17.33.12.33444			Min Dev	4135	259	115		5/2/1966	To/Qal	115	250	144	250	3885			OSE Well Record
Donnelly Drilling Co	L 04333	17.33.13.110			OWD	4136	217	165		12/4/1959	To/Qal	165	202	52					OSE Well Record
Potash Company of America	L 01880-s-2	17.33.13.31413			Min Dev	4124	235	151		3/16/1972	To/Qal	154	230	84	230	3894			OSE Well Record
Potash Company of America	L 01880	17.33.13.343			Min Dev	4129	245			8/18/1955	To/Qal				1				OSE Well Record (clean-out)
Potash Company of America	L 01882	17.33.13.43444			Min Dev	4128	245	144		3/16/1948	To/Qal	162	228	101	228	3900			OSE Well Record
Potash Company of America	L 01882	17.33.13.434			Min Dev	4128	245			9/22/1964	To/Qal								OSE Well Record (workover)
Potash Company of America		17.33.13.44444			Min Dev	4123	259	147		7/24/1952	To/Qal	120	239	112	241	3882			OSE Well Record
Potash Company of America	L 01883	17.33.13.444	I		Min Dev					9/26/1955									OSE Well Record (workover)
Midland Drilling Co	L 03622	17.33.17.12444	32.838584	103.685601	OWD	4207	226	180	4027	7/25/1957	To/Qal	180	200	46	224	3983			OSE Well Record
Kewanee Oil Co	L 02770	17.33.18.24111			PS	4215	214	179		6/28/1955	To/Qal	169	213	35	213	4002			OSE Well Record
Kewanee Oil Co	L 02773	17.33.18.322	I		PS	4218	214	184		6/6/1955	To/Qal	196	214	30		4218			OSE Well Record
Kewanee Oil Co	L 02773	17.33.18.322			PS	4225	220	202		7/16/1955	To/Qal	202	215	18	215	4010			OSE Well Record
Henry Black Drilling Co	L 03726	17.33.18.22113			OWD	4216	208	188		11/30/1957	To/Qal	188	207	20	207	4009			OSE Well Record
Warren-Bradshaw Exploration	L 02785	17.33.20.220	I		OWD	4171	250	190		5/20/1955	To/Qal	190	235	60	235	3936			OSE Well Record
Phillips Petroleum Co	L 03133	17.33.23.31320	I		OWD	4143	230	160	3983	3/4/1956	To/Qal	158	198	70	220	3923			OSE Well Record
Phillips Petroleum Co	L 03133	17.33.23.310	32.81832	103.6395	OWD	4143	230	70	4073	9/3/1958	To/Qal	158	198	160	220	3923			OSE Well Record (workover)
Southwest Potash Co	L 01695	17.33.25.24444	I		Min Dev	4093	230	137		4/21/1950	To/Qal	137	187	93	190	3903			OSE Well Record
Zapata Petroleum Co	L 03713	17.33.28.143			OWD	4180	210	dry		10/23/1957	To/Qal								OSE Well Record
El Paso Natural Gas Co	L 00058-2 misc	17.33.29.222221	32.811945	103.682131	Ind-Dom	4188	244	204	3984	7/22/1958	To/Qal	185	228	40	244	3944			OSE Well Record
								201.35		3/14/1961									GAI BLM 1978
Oil Test	1	17.33.29.34411			Oil Test	4044		61.43	3982.57	2/16/1971	To/Qal								GAI BLM 1978

TABLE IV.2.4 Records of Wells in the Vicinity of the DNCS Site DNCS Environmental Solutions

Owner or OCD Designation	OSE Permit Number	Location PLS	Location Lat D.dddd	Location Long D.dddd	Use	LS Elev	TD	WL	WL Elev.	Date	WBZ	Top WBZ	Bottom WBZ	WBZ thickness	Trc top	Trc elev	Tsr	Driller Yield	Comments or source
Conoco MCA Unit Battery 4 #133		17.33.30.11000	32.801966	103.709129	OCD	4033	casing to 3	913, redbed	s to 515, and	hydrite 515-533	3				28	4005			OCD Record 5/11/78
Conoco MCA Unit Battery 4 #134		17.33.30.12000			OCD	4057	casing to 1	185, redbed	s to 1145						45	4012			OCD Record 5/11/78
Conoco MCA Unit Battery 4 #135		17.33.30.14000			OCD	4062	casing to 2	0							85	3977			OCD Record 5/11/78
Conoco MCA Unit Battery 4 #197		17.33.30.31111	32.80457	103.710241	OCD	4037	casing to 3	963, redbed	s to 791, sar	ndstone 628-65	0				96	3941			OCD Record 5/11/78
Walter Williams stock well		17.33.30.124	32.810128	103.703623		4045		70	3975	7/29/1954									Nicholson & Clebsch
		17.33.30.12432				4053		69.14		2/16/1971									GAI BLM 1978
Cities Svc SMGSA Unit Tract 1 #2		17.33.30.42000	32.803774	103.696154	OCD	4055	casing to 1	199							145	3910			OCD Record 5/11/78
DNCS Properties LLC Boring 5		17.33.31.	32.78815	103.69491		3979.03	150	dry						0	65	3914.03			DNCS Site Boring Log
DNCS Properties LLC Boring 6			32d46m54.1s	103d42m27.1s		3939.5	75	dry						0	67	3872.5			DNCS Site Boring Log
Open Cased Hole		17.33.33.4224				4082		130.96	3951.04	2/16/1971	To/Qal								GAI BLM 1978
Dillard & Walterader Drilling Co	L 04363	17.33.35.32142			OWD	4122	226	160		1/5/1960	To/Qal	170	200	66	222	3900			OSE Well Record
Gulf Oil Corp	L 05096	17.33.35.433			OWD	4124	233	150		4/6/1968	To/Qal	150	230	83	230	3894			OSE Well Record
Gulf Oil Corp	L 05096	17.33.35.43332			OWD	4120	233	150		3/15/1963	To/Qal	150	230	83	230	3890			OSE Well Record
BE Frizzell	CP 566	18.32.4.144			dom	3864	133	65		6/3/1977	To/Qal	65	133	68	129	3735			OSE Well Record
Virgil Linam	CP 672	18.32.7.44233	32.756902	103.79895	stock	3759	524	430	3329	8/7/1992	Trc	460	489	29	100	3659			OSE Well Record
Virgil Linam	CP 672	18.32.7.44144			stock	3767	540	460	3307	1/29/1985	Trc	498	510		64?			12	OSE Well Record
Billy Williams	Not permitted	18.32.16.223433	35.752	103.7652	exp	3794	100	dry		9/3/1991				0	94	3700			OSE Well Record
Uncased open hole		18.32.16.22433				3973	100	84.18	3888.82	3/18/1968	To/Qal								GAI BLM 1978
Domestic Well		18.32.20.13311			dom	3470	270	179.35	3290.65	2/23/1971	Trc								GAI BLM 1978
Oil test		18.32.22.32322				3763		434.41	3328.59		Trc								GAI BLM 1978
TXO Production	CP 677	18.32.26.11143	32.724776	103.744505	OWD	3768	700	dry		5/9/1985	Sandstone	500-60	5	0	116	3652			OSE Well Record
Duval Corp.	O 13 002	18.32.32.111244			exp	3701	2060			6/22/1977	2 WBZ's '	Trc @ 2	74, Tsr @ 5	75		3701	575		OSE Well Record
Windmill		18.32.34.22241			stock	3721		117.46	3603.54	4/6/1971	Trc								GAI BLM 1978
Open Cased Hole		18.33.3.34133				4015		60.1	3954.9	4/5/1966	To/Qal								GAI BLM 1978
OXY USA Inc.	CP 758	18.33.4.34233	32.771967	103.669204	exp	3989	250	dry		5/10/1991					65	3924			OSE Well Record
DNCS Properties LLC Boring 3			32.77692	103.70411	exp	3940.23	150	dry		2/6/2013					45	3895.23			DNCS Site Boring Log
DNCS Properties LLC Boring 4			32.777	103.69465	exp	3968.20	150	dry		2/9/2013					50	3918.2			DNCS Site Boring Log
BJ Wooley	CP 546	18.33.9.42241	32.76111	103.660559	Com	3978	90	70	3908	6/3/1975	To/Qal	70	85	20	85	3893			OSE Well Record
	L 6131	18.33.8.213	32.766525	103.68429			194	100				130	193	63					OSE Waters POD summary
Heyco	CP 702	18.33.11.314112			OWD	4054	100			10/21/1986	To/Qal	52	82	100	82	3972		40	OSE Well Record
Heyco	CP 701	18.33.11.314121			OWD	3997	100			10/20/1986	To/Qal	54	84	100	84	3913		40	OSE Well Record
BJ Wooley	L 8288	18.33.12.33334			Com	3997	79	60		5/11/1982	To/Qal	60	80	19		3997			OSE Well Record
Yates Drilling Co	L 2878	18.33.12.440			OWD	4089	205	150		5/30/1955	To/Qal	150	205	55	200	3889			OSE Well Record
Scharbauer Cattle Co	L 6347	18.33.12.440			stock		170	130		7/12/1968	To/Qal			40					OSE Well Record (clean-out)
BJ Wooley	CP 623	18.33.13.11112			Com	3989	82	60		5/10/1982	To/Qal	70	80	22	80	3909		40	OSE Well Record
Sun Oil	CP 689	18.33.13.12122			OWD	4003	100			12/7/1985	To/Qal	70	95	100	95	3908		100	OSE Well Record
KMR Inc	CP 768 exp	18.33.13.21142			exp	4018	115	70		5/6/1992	To/Qal	80	110	45	110	3908		20	OSE Well Record
Unnamed well (Nicholson)		18.33.14.111	32.753778	103.640397	stock	3965	40	35.8	3929.2	6/3/1954	Qal			4.2	40	3925			Nicholson and Clebsch
Unnamed well (Nicholson)		18.33.19.142	32.735618	103.703433	stock	3820		>140	<3680		Tr(?)								Nicholson and Clebsch
Unnamed well (Nicholson)		18.33.34.133	32.704955	103.658439		3760	200	177.4	3582.6	12/9/1958	Tr(?)								Nicholson and Clebsch
W.E. Ellison	L 3454	18.33.30.220			dom	3791	100	35	3756	3/30/1957	To/Qal	70	97	65	97	3694			OSE Well Record

The map in **Figure IV.2.7** illustrates the elevation and terrain of the upper surface of the Chinle shale bedrock mapped by Nicholson and Clebsch (1961). Note that the Triassic shale top elevations determined by the DNCS onsite borings comport with the unaltered Nicholson and Clebsch (1961) isopleths on the upper redbed surface. **Figure IV.2.8** is a hydrogeologic cross section that was prepared using data from the DNCS site characterization borings, as well as the above referenced sources. **Figures IV.2.7** and **IV.2.8** illustrate the distribution and thickness of the Ogallala, the Quaternary alluvium, the Triassic Chinle bedrock shale and a significant sandstone unit (interpreted to be Santa Rosa Sandstone) that is projected to be laterally extensive in the area. On the DNCS site, the alluvium thickness ranges from 45 ft to 67 ft; based upon data projected from nearby wells, the depth to the Santa Rosa Sandstone beneath the DNCS site is approximately 550 ft. A Site Geologic Cross-Section based on the data acquired from site borings B-4 and B-5 is provided as **Figure IV.2.9**. This cross-section also identifies the landfill units and base grades.

3.4 Site Hydrogeology

This section addresses regulatory requirements for basic hydrogeologic site data, as well as for demonstration of compliance with siting requirements relative to minimum depth to groundwater, as follows:

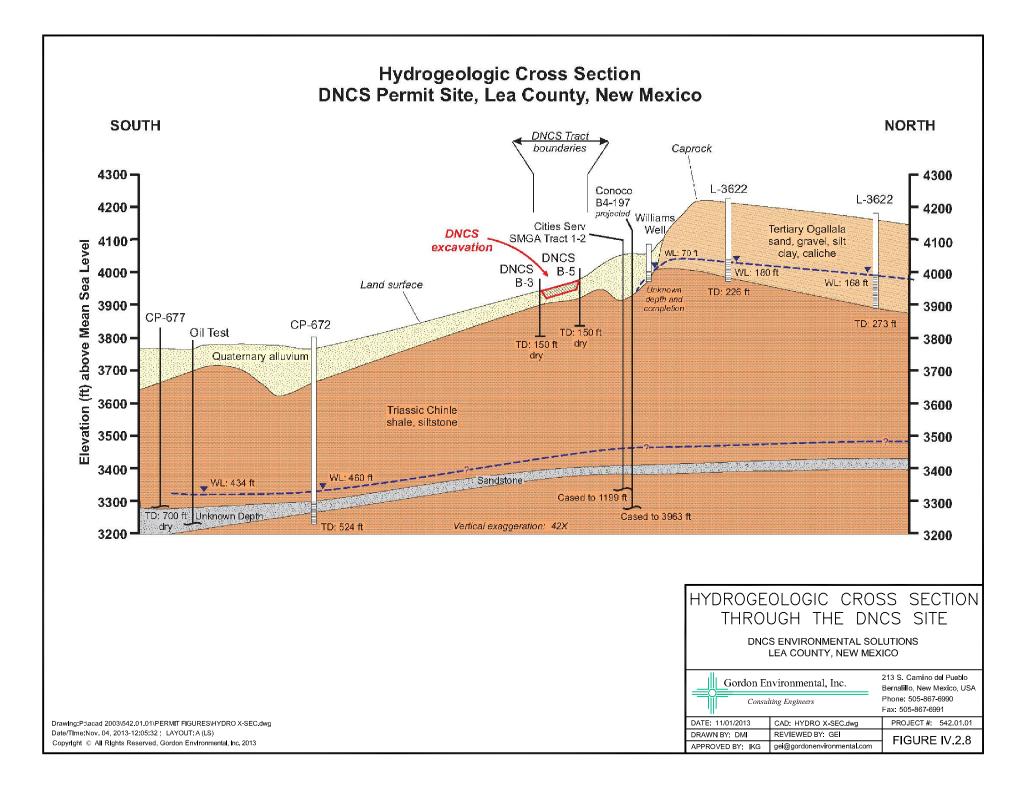
19.15.36.8.C.15 NMAC

- (a) a map showing names and locations of streams, springs and other watercourses and water wells within one mile of the site;
- (b) laboratory analyses, performed by an independent commercial laboratory, for major cations, and anions; BTE;, RCRA metals; and TDS of groundwater samples of the shallowest fresh water aquifer beneath the proposed site;
- (c) depth to, formation name, type and thickness of the shallowest fresh water aquifer;
- (d) soil types beneath the proposed surface waste management facility; including a lithologic description of soil and rock members from ground surface down to the top of the shallowest fresh water aquifer;
- (e) geologic cross sections;
- (f) potentiometric maps for the shallowest fresh water aquifer;

and

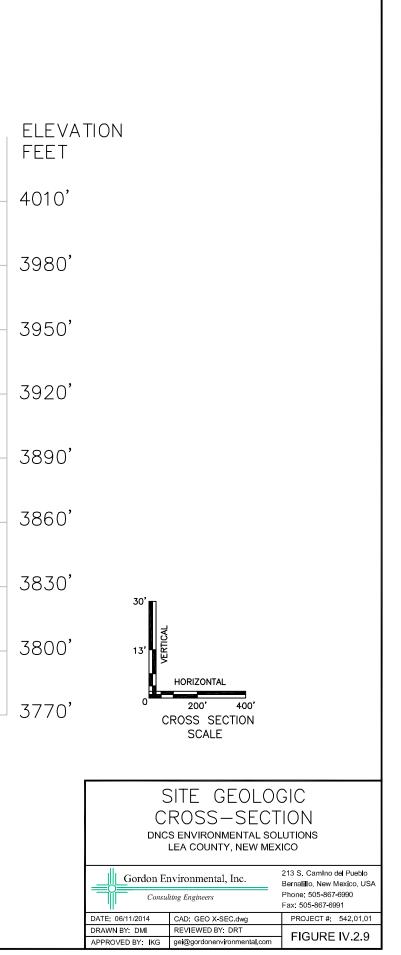
19.15.36.13.A(1) NMAC

Depth to groundwater: no landfill shall be located where groundwater is less than 100 feet below the lowest elevation of the design depth at which the operator will place oil field waste



SOUTHERN NORTHERN ELEVATION SITE BOUNDARY SITE BOUNDARY FEET LIMIT OF WASTE LIMIT OF WASTE -PHASE 2 PHASE 1 PHASE 3 4010' TOP OF PERIMETER TOP OF PERIMETER BERM ELEV. 3990' BERM ELEV. 3980' UNIT 9 UNIT 8 UNIT 7 UNIT 6 UNIT 5 UNIT 4 UNIT 3 UNIT 2 UNIT 1 3980' EXISTING GROUND SURFACE 28 TYP. 2% TYP! -BASE GRADE BORING B5-3950' BORING B4 SAND, FINE, WITH SILT AND CALICHE FRAGMENTS AND GRAVEL (1"-3")3920' 3890' CLAYSTONE AND SILTSTONE 3860' 3830' BORING DEPTH 150'-- BORING DEPTH 150' 3800' 3770' HORIZONTAL O' 1000' 2000' 3000' 4000' 4580' DISTANCE FEET

Drawing:P:lacad 2003/542.01.01/RAI 1/GEO X-SEC.dwg Date/Time:Jun, 12, 2014-13:08:45 ; LAYOUT: B (LS) Copyright © All Rights Reserved, Gordon Environmental, Inc. 2014

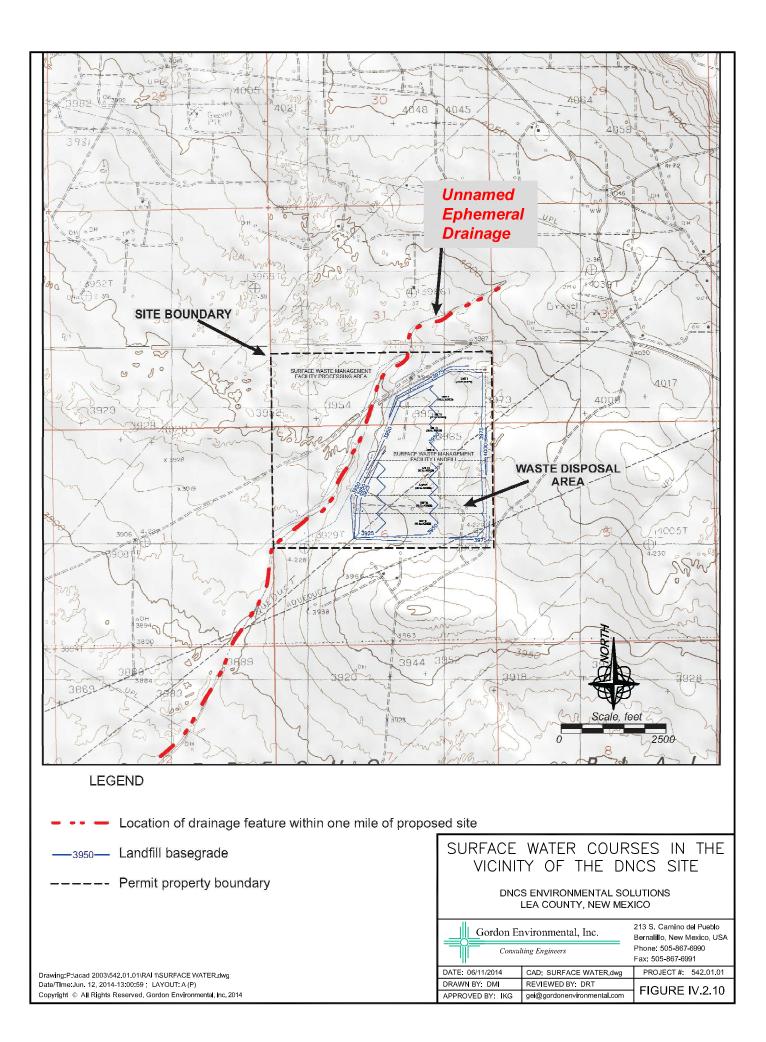


Section 3.3 describes the shallow stratigraphy at the DNCS site. Due to the great depth to the Santa Rosa Sandstone, which is the shallowest fresh groundwater bearing zone in the vicinity of the site, as well as high impedance to vertical movement of fluids present in the upper Triassic Chinle Formation, a *Proposal for Vadose Zone Monitoring, DNCS Environmental Solutions, Lea County, NM* (Golder Associates, Inc, 2013) was submitted to OCD in August 2013. No site demonstration wells have been completed in the Santa Rosa Sandstone and no site specific water level or water quality data are available. Where appropriate, published and agency file data on the Santa Rosa Sandstone relevant to permit application and siting requirements set forth in NMOCD regulations are presented.

3.4.1 Streams, Springs, Watercourses and Water Wells Within One Mile of the Site No perennial streams or springs are present within one mile of the proposed DNCS site. One unnamed ephemeral wash transects the property; the location of this feature is shown on the map in Figure IV.2.10, and discussed in Section 2.2 of this text. There are no water wells within one mile of the proposed DNCS site. Locations of water wells in the vicinity of the DNCS site are shown in Figure IV.2.7; a summary of vicinity wells is also included in Table IV.2.4. The nearest water wells in the area of the DNCS site include a well completed in alluvium (CP-546), located approximately 2 miles southeast of the site and another well (Williams Stock Well), located approximately 1.5 miles north of the site.

3.4.2 Laboratory Analyses of Shallow Groundwater Samples

The nearest water well to the DNCS site that is completed in Triassic bedrock (presumably Santa Rosa Sandstone) is located approximately 8 miles south of the DNCS site in Section 8, Township 19 South, Range 32 East. Nicholson and Clebsch (1961) reported data from a chemical analysis of a sample from this well; results of the analysis indicated a TDS of 3,680 mg/L and a sulfate concentration of 1,680 mg/L. The TDS concentration reported for this well is comparable to projected TDS values mapped by Dutton and Simkins, (1986) for the area of the DNCS site, which exceeds 3, 000 mg/L.



3.4.3 Depth, Formation Name, Type and Thickness of the Shallowest Fresh Water Aquifer

Copies of New Mexico Office of the State Engineer (NMOSE) Records of Wells in the vicinity of the DNCS site are included in **Attachment IV.2.D**. Several of the NMOSE Well Records contain depth and elevation data for the Triassic redbed tops, as well lower Triassic sandstone intervals from oil well logs obtained from OCD files. Numerous oil wells in the vicinity of the DNCS site penetrated significant sandstone beds in the lower Triassic section. Locations of these wells are shown on the map in **Figure IV.2.7**. Several water wells in the vicinity of the DNCS site which were completed in Triassic bedrock were identified by Nicholson and Clebsch (1961) and Geohydrology Associates, Inc. (1978). Locations of these wells are shown in **Figure IV.2.7**.

Projected geometry of the Santa Rosa Sandstone, as well as the potentiometric surface of this unit are illustrated on the hydrogeologic cross section in **Figure IV.2.8**. Well locations and summary formation and water level data for these wells are listed in **Table IV.2.4**. An oil well located approximately 1 mile north of the DNCS site (Conoco B4-197) penetrated 22 ft of Santa Rosa Sandstone in the depth interval of 628 ft to 650 ft below land surface. A water well located approximately 5 miles southwest of the DNCS site (CP-672) penetrated 29 ft of Santa Rosa Sandstone in the depth interval of 460 ft to 489 ft below land surface. Based upon projected Santa Rosa Sandstone data, it is anticipated that the Santa Rosa Sandstone is approximately 550 ft below land surface and is approximately 25 ft thick at the DNCS site.

3.4.4 Lithology of Stratigraphic Units Above the Santa Rosa Sandstone at the DNCS Site

Stratigraphic units which are above the Santa Rosa Sandstone in the vicinity of the DNCS site include Quaternary alluvium piedmont deposits and upper Triassic Chinle shale. Site characterization borings drilled on the DNCS site penetrated predominantly fine silty gravelly sands with calcrete (caliche) zones in the alluvial section. The site borings penetrated dense siltstone and claystone in the upper Triassic bedrock section to depths of 150 ft below land

surface. Available data from nearby oil wells contain only formation top depths for the Triassic redbeds and lower Triassic sandstones; however significant sand developments were noted only in the lower Triassic section.

3.4.5 Geologic Cross Sections

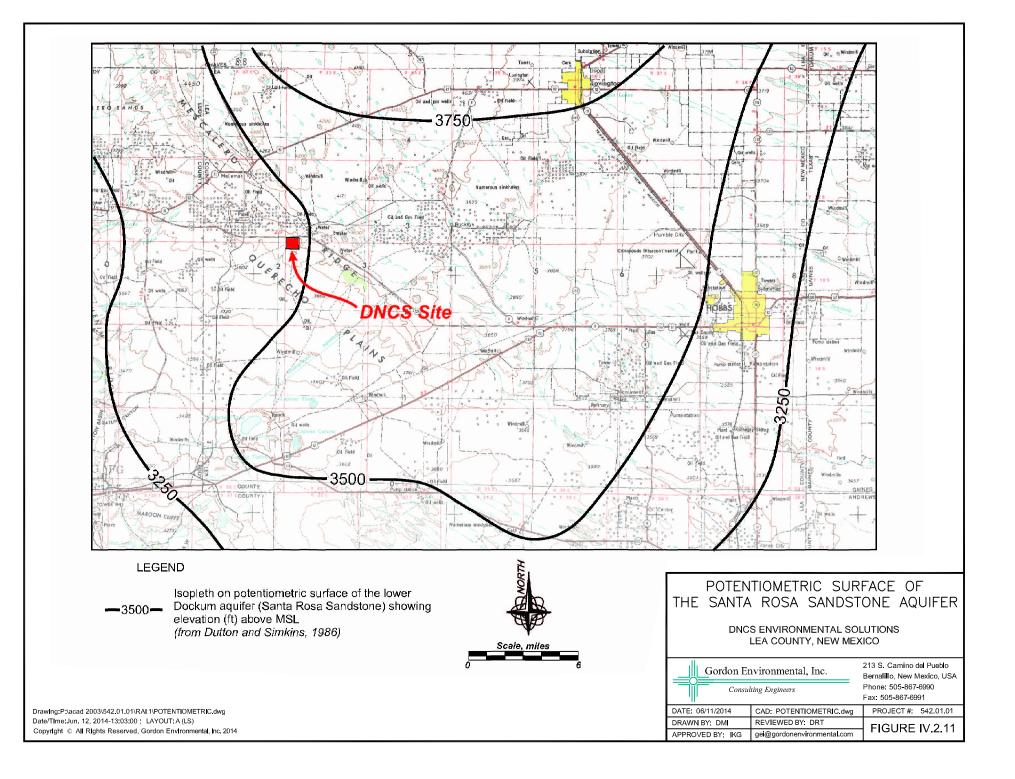
A geologic and hydrogeologic cross section depicting stratigraphy and geometry of the Santa Rosa Sandstone and its potentiometric surface is included in **Figure IV.2.8**. This diagram indicates that the depth to the Santa Rosa Sandstone at the DNCS site is projected to be approximately 550 ft.

3.4.6 Potentiometric Map of the Santa Rosa Sandstone

Potentiometric head value for the Santa Rosa Sandstone is unknown. Dutton and Simkins (1986) prepared a regional projection of the potentiometric surface of the lower Dockum Group aquifer (Santa Rosa Sandstone). The Dutton and Simkins map data is included in **Figure IV.2.11**. Based upon the Dutton and Simkins projection, the head elevation at the DNCS site is expected to be approximately 3475 ft or approximately 490 ft below grade. The artesian head on the Santa Rosa Sandstone at the DNCS location is expected to be approximately 60 ft.

3.4.7 Depth to Shallow Fresh Groundwater

The DNCS site characterization boring investigation results demonstrate that no shallow groundwater is present above a depth of 150 ft below land surface at any of the boring locations.



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APPLICATION FOR PERMIT DNCS ENVIRONMENTAL SOLUTIONS

VOLUME IV: SITING AND HYDROGEOLOGY SECTION 2: HYDROGEOLOGY

ATTACHMENT IV.2.A OCD APPROVAL (FEBRUARY 2013) SUBSURFACE INVESTIGATION WORKPLAN (GEI; JANUARY 2013)

Susana Martinez Governor

John Bemis Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey Division Director Oil Conservation Division



February 5, 2013

Charles Fiedler Gordon Environmental, Inc. 213 S. Camino del Pueblo Bernalillo, New Mexico 87004

RE: Hydrogeologic Investigation Boring Plan Commercial Surface Waste Management Facility DNCS Properties, LLC – Surface Waste Management Facility Facility Location: Section 31, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico

Dear Mr. Fiedler:

The Oil Conservation Division (OCD) has received Gordon Environmental Inc.'s boring plan proposal, dated February 1, 2013 and submitted on the behalf of DNCS Properties, LLC, to investigate and characterize the uppermost aquifer and subsurface geology for a proposed commercial surface waste management (landfill) facility permit located in Section 31, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico. OCD has completed the review and determined that the proposal is adequate to proceed with the site investigation.

OCD agrees that the proposed boring locations appear adequate. However, if the hydrogeologic conditions cannot be determined, additional borings or monitoring wells may be needed.

The OCD appreciates your cooperation in providing a boring plan for review, in order to determine if the submitted application and the proposed site are suitable for consideration of approval. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones

Environmental Engineer

BAJ/baj

Cc: OCD District I Office, Hobbs DNCS Properties, LLC, 2028 E. Hackberry Place, Chandler, AZ

SUBSURFACE INVESTIGATION WORKPLAN

DNCS PROPERTIES, LLC SITE LEA COUNTY, NEW MEXICO

JANUARY 2013

SUBMITTED TO:

New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505 Phone: 505.476.3440

PREPARED FOR:

DNCS PROPERTIES, LLC. 2028 E. Hackberry PL Chandler, AZ 85286

PREPARED BY:

Gordon Environmental, Inc. 213 South Camino del Pueblo Bernalillo, New Mexico 87004 Phone: 505.867.6990



SUBSURFACE INVESTIGATION WORKPLAN DNCS PROPERTIES, LLC SITE LEA COUNTY, NEW MEXICO JANUARY 2013

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SUBSURFACE INVESTIGATION WORKPLAN DNCS PROPERTIES, LLC SITE LEA COUNTY, NEW MEXICO

1.0 **PROJECT SUMMARY**

The DNCS PROPERTIES, LLC Site has been selected after an exhaustive analysis of both regulatory and non-regulatory criteria as a prime candidate for development of a "Commercial Facility" (i.e., surface waste management facility) for oil and gas wastes permitted under 19.15.36 NMAC (Part 36). The site is currently controlled by DNCS PROPERTIES, LLC (DNCS).

This Subsurface Investigation Workplan (Workplan) defines a field drilling and soil testing program to confirm compliance with the vertical groundwater setback distance of 100'. Gordon Environmental, Inc. (GEI) is requesting Oil Conservation Division (OCD) approval of this Workplan, the results of which will become a primary component of the Application for Permit. We met with OCD on 01/28/2013 to discuss the Project and this Workplan in detail, and followed up this meeting with a submittal of the Workplan on 01/31/13.

The DNCS Project includes a proposed 274-acre \pm surface waste management facility. The facility will be comprised of a 203-acre \pm landfill, as well as an Administration and Operations Area to support receiving and processing operations for oilfield wastes. The planned Application for Permit will provide design and operating details for the landfill and ancillary facilities. DNCS plans to submit an Application for Permit to OCD in compliance with the regulations for siting, design, and operations of a surface waste management facility for oil and gas wastes (19.15.36 NMAC).

1.1 Project Description

The DNCS site is comprised of 274-acres \pm of land located in portions of Section 31, Township 17 South, Range 33 East, NMPM and Section 6, Township 18 South, Range 33 East, NMPM in Lea County, NM (**Figure 1**). **Figure 2** is a site topographic map based on the USGS 7.5 minute Quadrangle for the area which shows the preliminary layout of the DNCS Facility, including the proposed landfill footprint, setbacks, and ancillary operations. It also indicates the location and transect for two borings completed to date (Section 3.2). The siting portion of the project, of which this Workplan is an integral part, consists of research and fieldwork to address each of the Part 36 siting criteria for surface waste management facilities (19.56.36.13 NMAC). The site has been confirmed on a preliminary basis to meet the other Part 36 siting standards via regional and on-site studies:

- Watercourses
- Floodplains
- Wetlands
- Subsurface mines
- Land use setbacks
- Unstable areas
- Site access
- Mineral rights
- Water wells

Additional field studies are planned once the vertical setback to groundwater is confirmed (i.e., ecological resources).

1.2 Landfill Design

The DNCS land disposal facility is planned as an "area fill" (vs. a "trench fill") with a series of east-west oriented landfill cells (**Figure 2**). The excavation will be conducted within the 203-acre \pm footprint identified on the same Figure.

The excavation, based on the preliminary design, ranges in depth form $20^{\circ} - 45^{\circ}$ (see crosssections **Figures 6, 7, 8**, and **9**). The landfill cells are currently shown at either 1,535' or 2,500' in width; and the floor of each cell is 400' ± wide. The perimeter on all four sides of the landfill unit will have a 3:1 sideslope.

The floor of each cell slopes at 2% from east to west, consistent with the surface grades. Each cell would be equipped with a central leachate collection header pipe (6" dia. HDPE); and associated sump, extraction riser, cleanout riser, etc.

The facility footprint is designed to provide a 200' setback from the potential watercourse. The regulatory status of the watercourse will be confirmed as part of future field studies. The existing boring (B-1); and planned borings B-3 - B-5 are all proposed to a depth of 150'

below ground surface (bgs); which is more than adequate to prove up a minimum groundwater depth of 100' below the deepest basegrade elevation (i.e., 45' bgs). **Table 1** provides a summary of the Proposed Boring Locations and elevations.

Boring	Northing	Easting	Elevation (Surface)	Elevation (Total Depth)
1*	649115	735931	3965	3815
2*	647593	734483	3948	3898
3	646842	734983	3950	3800
4	646842	737783	3974	3824
5	651302	737783	3989	3839

Table 1Summary of Existing and Proposed BoringsDNCS PROPERTIES, LLC SITE

Notes: NGVD29

*Existing drilled on February 2012

1.3 Subsurface Investigation Workplan Objectives

The primary objective of the field effort proposed herein is to collect site-specific subsurface information to identify the stratigraphy, and to verify that a minimum vertical setback of 100 feet exists between viable groundwater and the basegrades of the proposed landfill. This Workplan describes the proposed drilling program to evaluate the subsurface conditions at the proposed DNCS Site in compliance with the requirements of 19.15.36.8.C(15) NMAC and 19.15.36.13.A NMAC. The purpose of this Plan is to outline the rationale and approach by which geologic and hydrogeologic information will be collected to identify site conditions. This drilling program has been developed and will be implemented with OCD approval, to accomplish the following:

- Refine the geologic/hydrogeologic site database as needed
- Characterize subsurface materials for their geotechnical/engineering properties
- Identify parameters for a groundwater monitoring program, if applicable (this Plan does not propose to install monitor wells in conjunction with this effort)

2.0 GEOLOGY AND HYDROGEOLOGY

The local geology of the DNCS site is poorly documented. Most oil and gas well logs in the area do not have detailed lithologic data for strata above the Permian Rustler Formation, which is typically deeper than 1200 feet below ground surface. Generalized geologic and hydrologic information for the area is discussed in Nicholson and Clebsch, (1961), "*Geology and Ground-Water Conditions in Southern Lea County, New Mexico*", New Mexico Bureau of Mines and Mineral Resources Ground-water Report 6. The generalized geologic and hydrologic information for the area west of the site, in Eddy County, is discussed in Hendrickson and Jones, (1952), "*Geology and Ground-Water Resources of Eddy County, New Mexico*", New Mexico Bureau of Mines and Mineral Resources Ground-water Resources Ground-Water Resources Ground-Water Resources of Eddy County, New Mexico", New Mexico Bureau of Mines and Mineral Resources Ground-Water Resources of Eddy County, New Mexico", New Mexico Bureau of Mines and Mineral Resources Ground-Water Report 3, 169p. Several revisions to the interpretations of the geolomorphologic, geologic, and stratigraphic relationships of the local deposits have been published since these two studies, i.e., Kelly (1971),Summers (1972), (Bachman (1974), Bachman (1976), Hunt (1977), Bachman (1980), Bachman (1987), Hawley (1993a), Hawley (1993b), Powers and Holt (1993),), Lucas and Anderson (1994a), Lucas and Anderson (1994b), Kennedy (1997), Lehman (1994), and Ziegler, Kelly and Geismann (2008) (Section 5.0).

2.1 Geomorphology, Geology, and Stratigraphy

An index geomorphic and surface geologic map of the area is presented as **Figure 3**, and a generalized geologic map as **Figure 4**.

A stratigraphic chart representing the expected subsurface geology in the region surrounding the site is presented in **Figure 5.** The only rocks in the chart not expected to exist directly under the site would be the Ogallala Formation. The Ogallala has been removed by erosion in the immediate site area prior to the deposition of Tertiary and Quaternary sediments, but is exposed east of the site on Mescalero Ridge (The Caprock) where it is preserved.

Only late Permian (Ochoan) Rustler Formation and younger rocks are discussed here because potable water is unlikely to occur in rocks deeper or older than these deposits. Domestic, municipal, and stock wells in the general area of the site rarely tap units older than the Rustler Formation rocks.

2.2 Description of Tertiary and Quaternary alluvial and eolian deposits Mescalero Sands, Mescalero Caliche and Gatuña Formations

"The combination of tectonic, surface-fluvial and subsurface-dissolutional processes acting for at least the past 12 to 13 Ma has produced a very complex system of landforms and valley and depression fills in the Carlsbad area. These units are still incompletely characterized and understood, particularly in terms of absolute chronology of events. (**Figure 3**).... "Nye (1933, p. 11-12) defined a stepped-sequence of geomorphic surfaces (both erosional and constructional) that flank the modern Pecos floodplain in the Roswell artesian-basin segment of the lower Pecos Valley.

The only post-High Plains surface recognized by Nye east of the valley is the Mescalero Plain, a broad undulating surface locally covered by eolian deposits (Mescalero Sand) and disrupted by many solution-subsidence depressions. The surface is separated from the Llano Estacado by the "Mescalero Ridge" escarpment. Relict and shallowly buried parts of the Mescalero Plain, which stabilized in the late Pliocene (?) to middle Pliocene, are characterized by a caprock calcrete unit that has been designated the "Mescalero caliche" by Bachman (1976, 1980).

Nye (1933) correlated the Mescalero plain with the Diamond A plain, a poorly preserved piedmont surface west of the Pecos Valley that is primarily an erosional feature cut on carbonate rocks of the Sacramento uplift. Projected gradients of these two surfaces, neglecting subsequent solution-subsidence effects, place them from 300-500 ft above the modern valley floor. Valley fills and erosion-surface veneers genetically associated with the Mescalero and Diamond A plains have long been referred to as Gatuña Formation (Lang, 1938; Vine, 1963; Bachman, 1976, 1980, 1981, 1984; Powers and Holt, 1993)." (Hawley, 1993a p.2-3). The thickness of the Tertiary and Quaternary strata is unknown under the site, but can be estimated to be up to 400 feet based on interpretations of driller's logs of oil wells in the area.

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2.3 Description of Late Triassic and Late Permian strata

Triassic Rocks

"South of Pavo Mesa and along the east side of Crow Flats, Triassic and Permian rocks are contorted, fractured and exposed as chaotic angular blocks......The Gatuña Formation rests unconformably on this chaotic structure..."(Bachman 1974, p. 55). Triassic-aged Dockum Group (Chinle Group) outcrops are exposed east and south of the site (**Figure 4**). The Dockum Group is up to 1000 feet thick east of Artesia (Hendrickson and Jones, 1952; p. 23) and consists of redbeds and sandstones. This thickness estimate may also include the underlying late Permian Quartermaster Formation (Dewey Lake Formation).

All Triassic strata in southeastern New Mexico are now considered to be included in the Chinle Group (Lucas and Anderson, 1993b). The sandstone and conglomerate dominated Santa Rosa Formation of the Chinle Group being at the base. The claystone and mudstone dominated San Pedro Arroyo Formation of the Chinle Group conformably overlies the Santa Rosa Formation. The San Pedro Arroyo Formation is reported to be 26 feet thick near The Maroon Cliffs area, 20 miles south of the site, apparently thins to the north, and is absent in the Mesa Diablo Area in northern Chavez County. Triassic rocks unconformably overlie the late Permian (Ochoan) Quartermaster (Dewey Lake) Formation and Rustler Formation strata. Upper Permian (Ochoan) Rustler Formation and Quartermaster Formation (Dewey Lake) rocks are the oldest rocks exposed in the area near the DNCS site (**Figures 3** and **4**).

Quartermaster (Dewey Lake) Formation

The Quartermaster Formation beds (formerly Pierce Canyon redbeds), up to 350 feet thick near Pierce Canyon, at a distance of 40 miles south-southwest of the site, overlie the Rustler Formation rocks. The Quartermaster thins to the north and is absent north of the latitude of Artesia.

Rustler Formation

The Rustler Formation was named by Richardson (1904) for exposures in the Rustler Hills of Culberson County, Texas (Lucas and Anderson, 1993). East of the DNCS site, in the Crow Flats area, Bachman (1974) describes outcrops of Permian Rustler Formation overlain by conglomeratic cross-bedded dark-reddish-brown sandstone of late Triassic age which are overlain by Gatuña Formation strata.

3.0 WORKPLAN OBJECTIVES

Data obtained from the implementation of this proposed effort will confirm the characterization of the site geology and hydrogeology; as well as provide information regarding the presence of groundwater to a depth of at least 100 feet below the proposed deepest landfill basegrade elevation. This data may also be instrumental in defining characterization of the groundwater zone indicated for monitoring; and subsequent placement of the groundwater monitoring well network if applicable (no groundwater monitor wells are proposed with this Plan).

DNCS has made a business decision to confirm that groundwater is greater than 100 feet below the lowest elevation of the design depth of the landfill (as required in 19.15.36.13 A (1)NMAC) prior to committing the resources required to develop a groundwater monitoring plan (as defined in 19.19.15.36.14 B). This decision was made with the understanding that if groundwater exists at this site, 19.15.36.8.B (15) (b) requires *"laboratory analysis, performed by and independent commercial laboratory, for major cations and anions; BTEX; RCRA metals; and TDS of ground water samples of the shallowest fresh water aquifer beneath the proposed site"* as part of the Permit Application. This requirement will necessitate the drilling and installation of a monitor well to provide the required information.

3.1 Preliminary Investigation

A Preliminary Investigation was completed in February 2012, and is a significant predicate for the Scope of Work proposed for this Workplan. Borings B-1 and B-2 were drilled during this initial investigation (**Figure 2**) to confirm the absence of groundwater, and to provide initial geotechnical information to complete the preliminary site screening. Borings proposed

in this Workplan will be continuously cored and sampled at select intervals using a drive sampler(s) for:

- Identification of subsurface materials
- Verification that groundwater is not present
- Collection of selected samples for laboratory testing of the required geotechnical properties in conformance with 19.15.36.8.C(15) NMAC.

3.2 Preliminary Drilling Summary

On February 15, 2012; two exploratory borings (B-1 and B-2) were drilled at the locations shown on **Figure 2**. **Table 2** summarizes the completed information for each of the borings. The borings were drilled by Precision Drilling of Albuquerque, using a CME 85 hollow stem auger (HSA).

Table 2 Summary of DNCS Phase 1 Borings B-1 and B-2 DNCS PROPERTIES, LLC SITE

BORING	GPS COORDINATES	DRILLING METHOD(S)	DEPTH (FBGS)	LITHOLOGY
B-1	N 32° 46.968' W 103° 42.012' Elev. ~3965	A	150 (TD) Elev. ~ 3815	-Coarse-grained soils (i.e., silty sands) were encountered to a depth of 125' below ground surface (bgs). Claystones, likely of the prevalent Chinle formation, were present from 125' to 150' bgs. No free water was encountered during drilling; including the absence of perched water at the sand/claystone interface
B-2	N 32° 46.722' W 103° 42.294' Elev. ~3948	A	50 (TD) Elev. ~3898	-Coarse-grained soils (i.e., silty sands) were encountered to the total depth below ground surface (bgs).

A = hollow stem auger (7" OD); C = continuous core (3.5" OD, 2.5" ID); R = air rotary; S = 2" OD, 1.38" ID split spoon sampler NQ = 75 mm OD, 47.6 mm ID wireline core; TD = total depth drilled; FBGS = feet below ground surface

The primary purposes of this drilling effort was to determine if shallow groundwater is present beneath the proposed Solid Waste Management Facility (19.15.36.13.A NMAC). The drilling was successful in determining that groundwater is not present beneath the site surface to the total depths of the two borings (**Table 1**) at the locations indicated.

3.3 Field Investigation

The proposed Workplan contained herein is documented for formal review and approval by OCD. GEI formulated this Workplan to meet the requirements of the Part 36 Regulations and in response to previous experience on similar projects. GEI will not conduct any further subsurface investigations until this program is approved by OCD.

Based upon GEI's experience on similar sites, this Workplan has been formulated to meet OCD guidelines and suggestions for hydrogeologic characterization of new Part 36 Surface Waste Management Facilities. The field investigation will be refined as the drilling progresses in consultation with OCD.

This Workplan will supplement the data collected from the Preliminary Investigation conducted in February 2012 (Section 3.1). **Figure 2** illustrates the proposed locations of the following:

- Existing Borings B-1 and B-2
- Three proposed borings (B-3, 4 and 5)
- Landfill unit configuration

The three borings (B-3 through 5) will be drilled with continuous coring and sampling at 5foot intervals to a depth of at least 100 ft below the proposed landfill basegrade (i.e., 150' below ground surface). The borings will be drilled in conformance with Part 36 and OCD policies and guidelines to verify that groundwater does not exist beneath the proposed landfill within 100 ft of the landfill basegrade.

Prior to any drilling of the borings, the New Mexico Office of the State Engineer (OSE) field office in Roswell must issue permits for exploratory wells for each of the three borings. A qualified drilling subcontractor will complete the necessary exploratory well permit applications and obtain OSE approval for drilling the borings.

Three geotechnical borings (B-3 through 5) are proposed at the locations shown on **Figure 2** and identified in **Table 1**. Minor adjustments to the locations may be necessary as determined in the field. The borings will be drilled using a portable CME 75 or CME 85 drill rig capable of using both hollow-stem auger (HSA) and air rotary methods. Each boring will

be drilled to a total projected depth of 150 ft below ground surface at each respective boring location. During HSA drilling, split-spoon, California Modified, brass ring or Shelby tube samples will be collected at 5-foot intervals for visual classification and laboratory analysis for geotechnical properties in conformance with (19.15.36.8.C(15)(g) NMAC) see **Table 3**. **Table 4** provides the OCD Part 36 requirements for soil testing that were identified. In the event that moist soils are encountered, we are prepared to provide standby time (up to 3 hours per occurrence) to assess the degree of saturation and potential for monitoring.

All three geotechnical borings will be plugged from total depth to existing grade. Plugging will be accomplished using 5 percent bentonite-cement grout slurry in conformance with plugging and abandonment standards of both the New Mexico OSE and the New Mexico Environment Department (NMED). DNCS understands that if groundwater is encountered in these borings, additional borings will be required to establish monitor wells for sampling and assessment of the groundwater quality. This is a business decision, made by the DNCS, to pursue confirmation that groundwater is greater than 100 feet below the lowest elevation of the design depth of the landfill (as required in 19.15.36.13 A (1)NMAC).

Proposed Geotechnical Borings									
ID	Total Depth	Dry Sieve Analysis	Atterberg Limits	K _{sat}	Classification (USCS)	Moisture Content	Dry Density	Standard Proctor Density	
B-3	150	9-10	4-5	2-3	9-10	9-10	3-4	3-4	
B-4	150	9-10	4-5	2-3	9-10	9-10	3-4	3-4	
B-5	150	9-10	4-5	2-3	9-10	9-10	3-4	3-4	

Table 3Summary of Proposed Sampling and Laboratory Testing
DNCS PROPERTIES, LLC SITE

Notes:

- Standard penetration tests (blow counts) will be recorded at each sampling interval
- Porosity is calculated from the dry density and moisture content determination from an undisturbed brass ring sample
- Atterberg Limits testing will only be conducted on fine-grained materials

Table 4

OCD Requirements for Soil Testing (Pursuant to 19.15.36 NMAC)

Total Porosity:

- Initial Properties: Moisture Content (ASTMD2216 10; ASTM D6836 68(2006))
- Dry Bulk Density (ASTM D6836)
- Calculated Porosity (ASTM D6836 68(2006)).

Permeability/Saturated Hydraulic Conductivity:

- Standard Test Method for Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter (ASTM D5856 95(2007))
- Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter. (ASTM D5084 10)

Compaction Ratios:

• Proctor Compaction Test. (ASTM698 – 07e1)

Swelling Characteristics:

• Atterberg Limits. (ASTM D4318 - 10)

Ancillary but necessary work proposed for the Workplan includes:

• <u>Surveying</u>: A professional surveyor licensed in the state of New Mexico will determine the coordinates (X,Y,Z) of all borings

3.4 Sample Recovery

The unconsolidated and dry sands encountered in the preliminary drilling program, and typical of the region, may represent challenges for core sample recovery. The driller plans to deploy the following techniques to improve sample recovery, as necessary:

- "Sand catchers" installed in the shoes of the Core Barrels.
- Use of 4" dia. barrel vs. standard 3" dia. barrel.
- Deployment of split-spoon or California Modified samplers as necessary.
- Back-to-back split spoons with a center bit to ensure undisturbed samples.

3.5 Investigation Results

The results of the implementation of this Workplan comprised of the preliminary drilling program and this proposed investigation will be correlated with the regional database. It will serve as the platform for the engineering design of the facility and future characterization of the site geology and hydrology as required under 19.15.36.8.C(15) NMAC. Upon completion of this Workplan, the resulting data will be included in the Application for Permit.

4.0 ANALYSIS AND REPORTING

The analysis and reporting required to document the site-specific geology and hydrology per 19.15.36.8.C(15) NMAC, and the siting requirement related to depth to groundwater at the proposed facility (19.15.36.13.A NMAC) includes the following:

- Cataloging and managing soil samples
- Illustrative graphics
- Permit application text, figures, tables and attachments

4.1 Sample Handling and Cataloging

Select soil samples will be collected (typically split spoon and maybe Shelby tube) from the borings as described in Section 3.2 of this Workplan. All of the samples will be cataloged, and select samples (representative of the subsurface materials encountered) will be delivered to the geotechnical testing laboratory for testing of select engineering properties (**Table 2**). GEI works closely with the testing laboratory regarding appropriate analysis methods, sample preparation, and timing to meet the project requirements.

4.2 Graphics

Key graphics required for reporting of regional and site-specific geologic and hydrogeologic investigations include boring logs, well completion diagrams, and hydrogeologic cross sections. These graphics form the basis for proper characterization of the subsurface materials, correlation of the materials across the site, correlation of the materials to the regional setting, and also form the basis for the discussion of the regional and site geologic and hydrogeologic conditions (see Section 2.2).

Logs are detailed graphical representations of subsurface conditions at the location of the boring. The logs will include:

- A standardized visual description of the materials drilled, as determined by the qualified GEI professional, from core, drive, and/or cutting samples, as appropriate
- A record of the intervals sampled
- Drilling and sampling methods
- Rig blow counts (for drive samples)
- Percent core recovered
- Drill time

- Engineering index properties (moisture content, density, and USCS classification) and hydraulic conductivity (where appropriate) as determined by the geotechnical testing laboratory
- Project information (logging geologist/engineer, driller, date completed, rig/boring data, surface elevation, and location coordinates)
- Documentation of *in situ* soil moisture in samples recovered

Geologic/hydrogeologic cross sections are required per 19.15.36.8.C(15)(e) NMAC. The boring logs described above form the basis for development of the cross sections. The cross sections illustrate the correlation of soils and lithology across the site in conformance with 19.15.36.8.C(15)(d) NMAC.

5.0 **REFERENCES**

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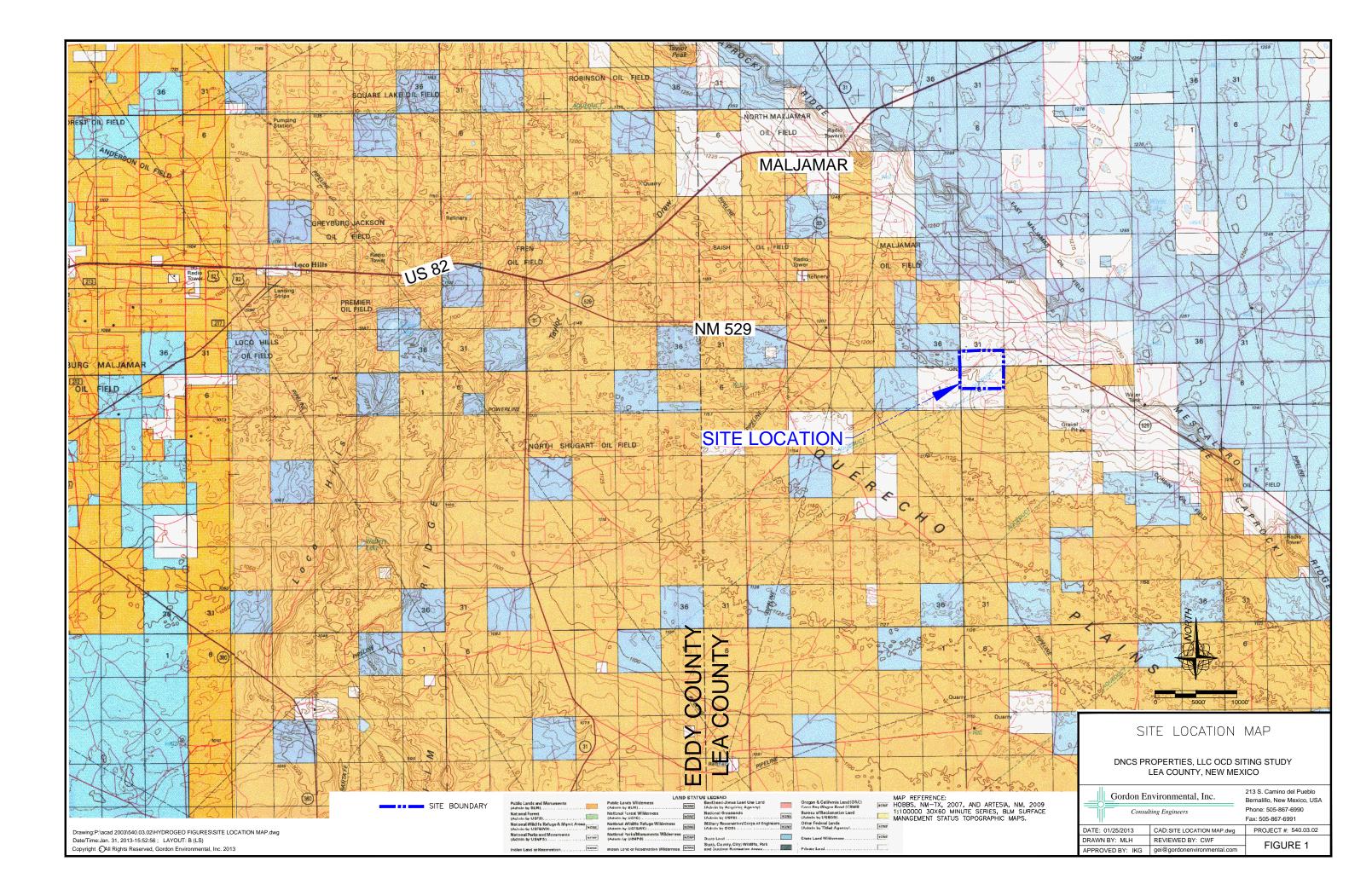
SUBSURFACE INVESTIGATION WORKPLAN DNCS PROPERTIES, LLC SITE LEA COUNTY, NEW MEXICO

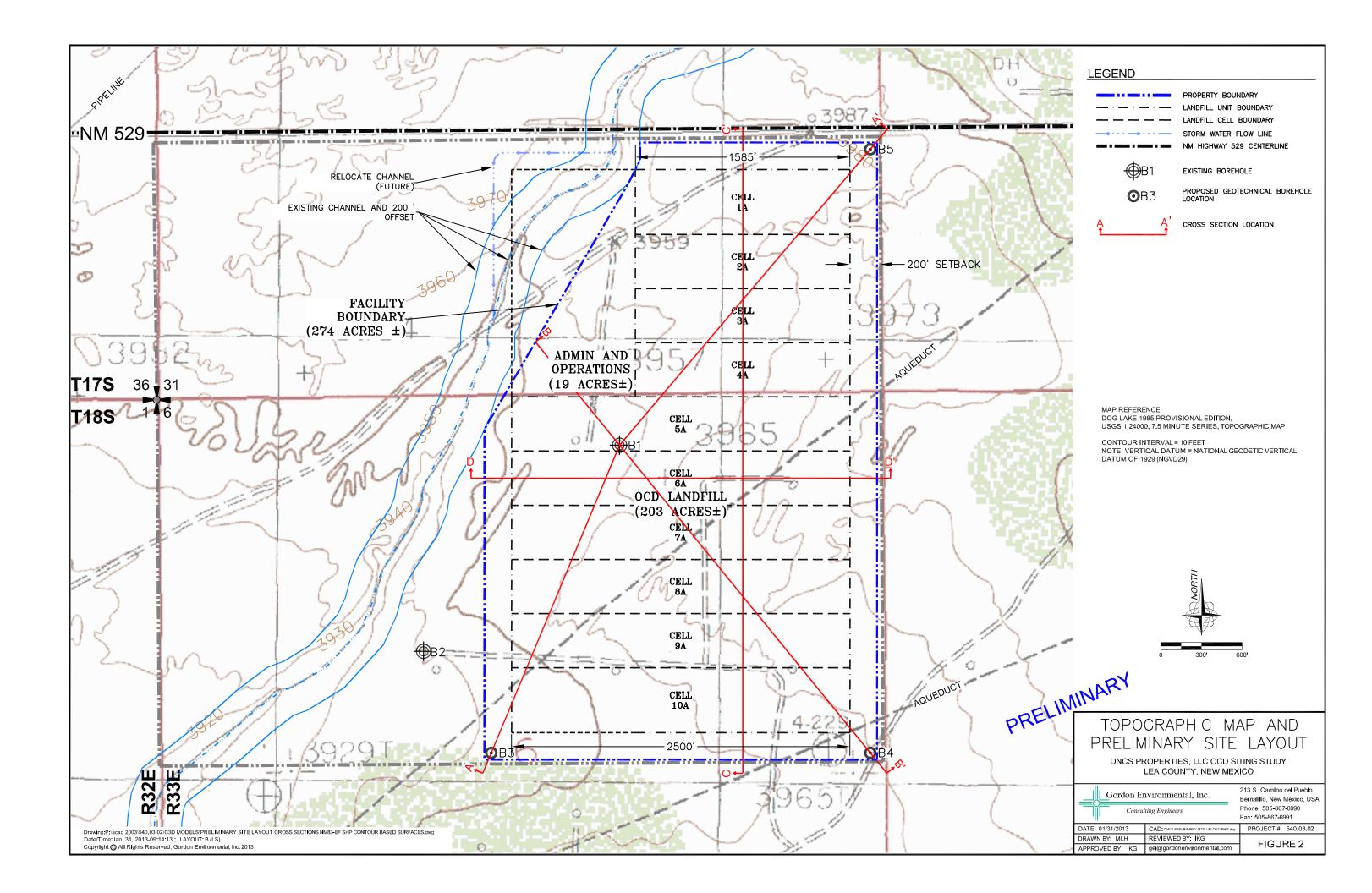
Figures

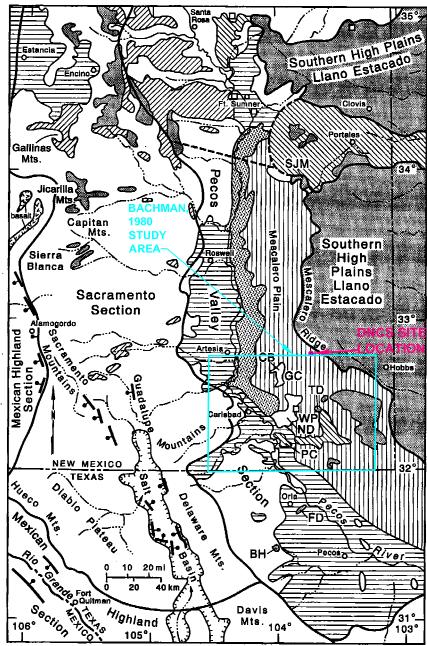
Figure No.

Title

- 1 SITE LOCATION MAP
- 2 TOPOGRAPHIC MAP AND PRELIMINARY SITE LAYOUT
- 3 GEOMORPHIC AND SURFACE GEOLOGY MAP
- 4 GENERALIZED GEOLOGIC MAP
- 5 PROJECT AREA STRATIGRAPHIC CHART
- 6 CROSS SECTION A-A'
- 7 CROSS SECTION B-B'
- 8 CROSS SECTION C-C'
- 9 CROSS SECTION D-D'







Explanation

Undivided valley fill and Permian bedrock units in Fort Sumner to Carlsbad segment of the Pecos Valley; complex of valley-floor alluvium, terrace deposits and solution-subsidence depression fills (Pliocene-Quaternary), including "upper" Gatuña Formation, with extensive exposures of Dewey Lake-Quartermaster (Ochoan), residual Salado-Rustler (Ochoan), and Artesia Group (Guadalupian) rocks.

Undivided valley and basin fill of the Estancia and Roswell-Artesia basins, and Carlsbad-Pecos segment of the lower Pecos Valley (Delaware basin); complex of fluvial and eolian deposits, and undifferentiated fills of solution-subsidence depressions (Middle Miocene-Quaternary); includes Ogallala and Gatufia Formations, "quartzose and limestone conglomerates", and younger valley fill. Outcrops of Triassic and Permian rocks are locally extensive, and small exposures of Precambrian rocks are present on the Pedernal uplift.

Older surficial sediments of the Mescalero Plain and eastern border of the lower Pecos Valley; complex of eolian, fluvial and depression-fill deposits and pedogenic calcretes (Pliocene to Middie Pleistocene) inset below the High Plains (Llano Estacado) surface and the Ogallala caprock calcrete zone; primarily "upper" Gatuña Formation with Quaternary eolian cover, but includes exposures of "lower" Gatuña-Ogallala, and Triassic and upper Permian rocks in solution-subsidence depressions and tributary valleys.

Older piedmont and valley-fill alluvium, and karst-depression fills on upland erosion surfaces of the upper Pecos Valley and Sacramento sections; coarse gravelly to sandy deposits and pedogenic calcretes (late Miocene to early Pleistocene); includes undivided Ogaliala and Gatuña Formations, exposures of Precambrian, upper Paleozoic, and Triassic rocks, and discontinuous cover of younger Quaternary alluvial and eolian deposits.

Older fills of the Portales, and upper and lower Pecos Valley segments; complex of fluvial and eolian deposits, calcretes, and solution-subsidence depression fills (middle Miccene to Quaternary); includes Ogaliala and "lower" and "upper" Gatuña Formations, and overlying eolian cover sediments correlative with the Blackwater Draw Formation of the Liano Estacado.

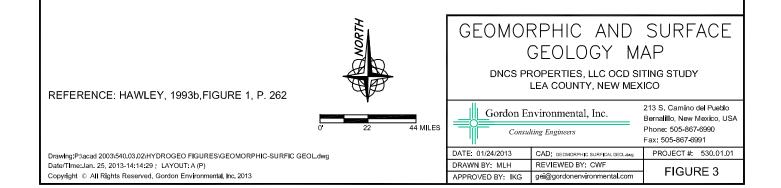
Ogallala Formation (middle Miocene to early Pilocene); thick complex of eolian, fluvial, and minor lacustrine deposits (sand, slit, clay, with local gravelly facies), and caprock calcrete zones east of the Pecos Valley; and thin gravelly to sandy alluvial deposits, with calcrete zones, capping upland valley and pledmont erosion surfaces west of the Pecos. Includes 1) extensive cover of Pilo-Pieistocene eolian sediments (Blackwater Draw Formation) on the Southern High Plains (Llano Estacado), and 2) Pliocene-Quaternary alluvium, eolian deposits and karst depression fills west of the High Plains.

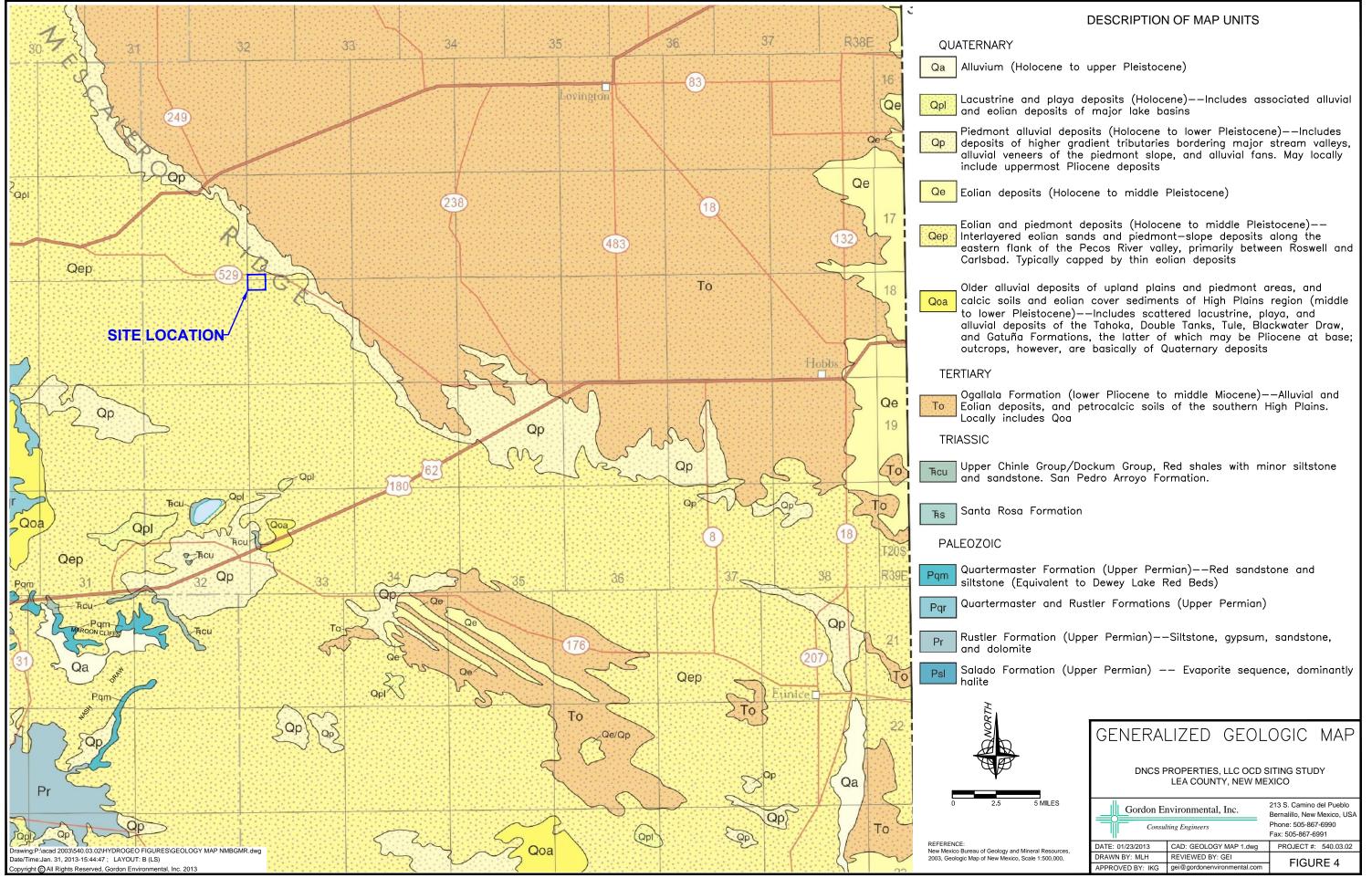
Early to middle Pleistocene ash-fall deposits derived from Jemez and Yellowstone volcanic centers.

Quaternary fault zones.

Physiographic section boundaries.

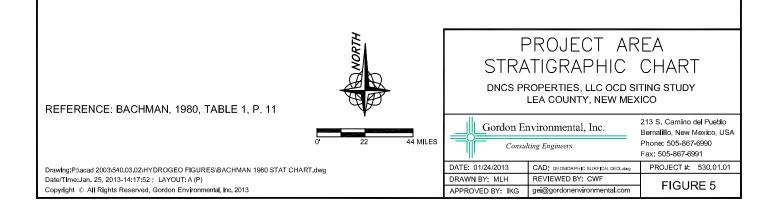
Index map of southeastern New Mexico region showing location of major physiographic subdivisions and general distribution patterns of upper Cenozoic deposits that include the Ogallala and Gatuña Formations or their correlatives. Occurrences of Plio-Pleistocene volcanic ashes and zones of known Quaternary faults are also shown. BH = Burnt Hills (TX), CB = Clayton Basin (NM), FD = Fourmile Draw (TX), GC = Gatuña Canyon (NM), ND = Nash Draw (NM), PC = Pierce Canyon (NM), TD = The Divide, SJM = San Juan Mesa (NM) and WP = WIPP site.

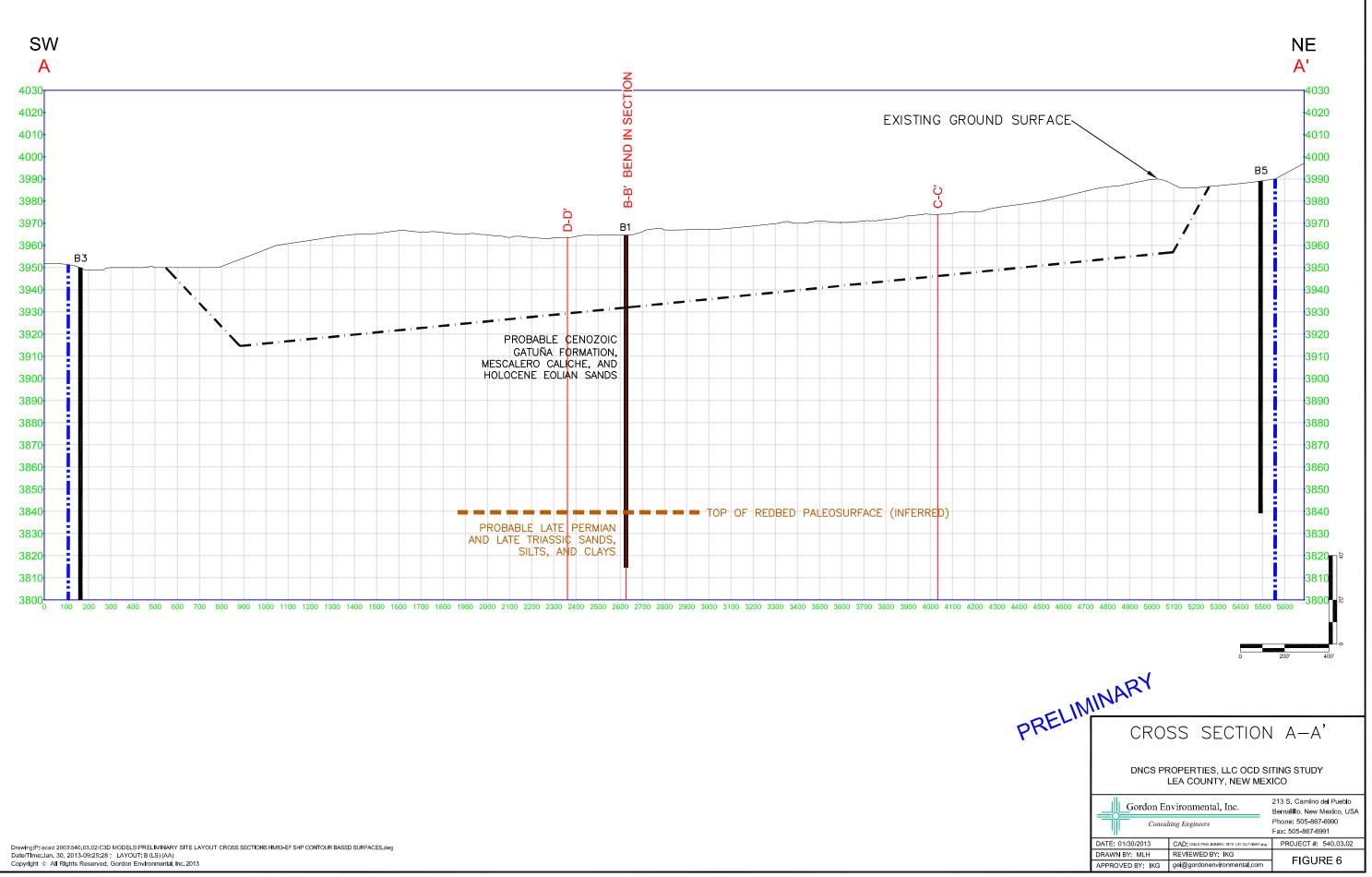


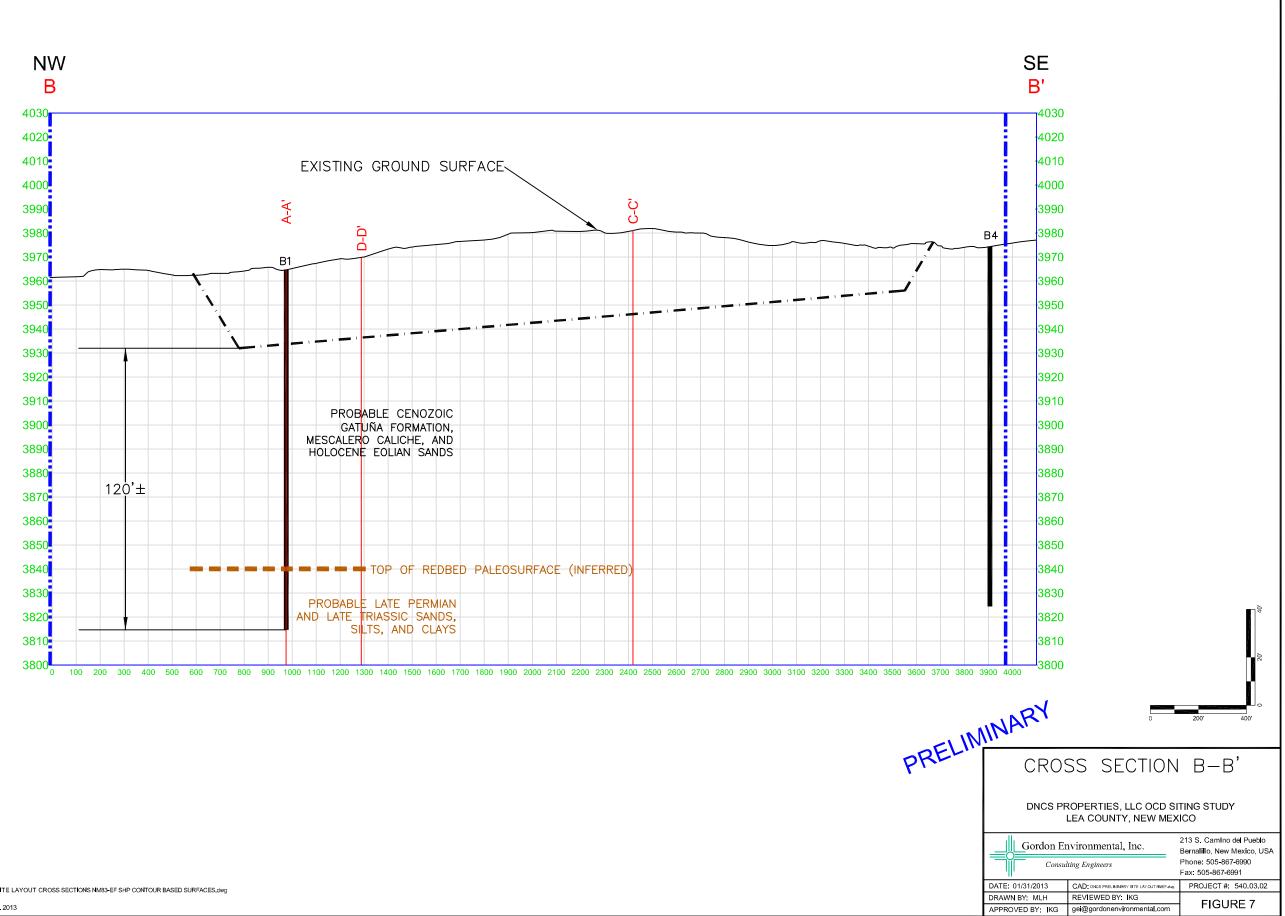


ERA	SYSTEM	SERIES	FORMATION	AGE ESTIMATE
	Quarternary	Holocene Pleistocene	Windblown sand Mescalero caliche Gatuna Formation	ca. 500,000 years ca. 600,000+ years
Cenozoic	Tertiary	Pliocene Miocene	Ogallala Formation	-5 million years
		Oligocene Eocene Paleocene	Absent Southeastern New Mexico	26 million years
	Cretaceous	Upper (Late) Lower (Early	Absent SE N. Mex. Detritus preserved	65 million years
Mesozoic	Jurassic		Absent SE N. Mex.	190-195 million years
	Triassic	Upper (Late) Lower	Dockum Group Absent SE N. Mex.	
		Ochoan	Dewey Lake Red Beds Rustler Formation Salado Formation Castile Formation	225 million years
Paleozoic	Permian	Guadalupian Leonardian Wolfcampian	Capitan Limestone and Bell Canyon Fm. Present but not dis- cussed in this report	280 million years

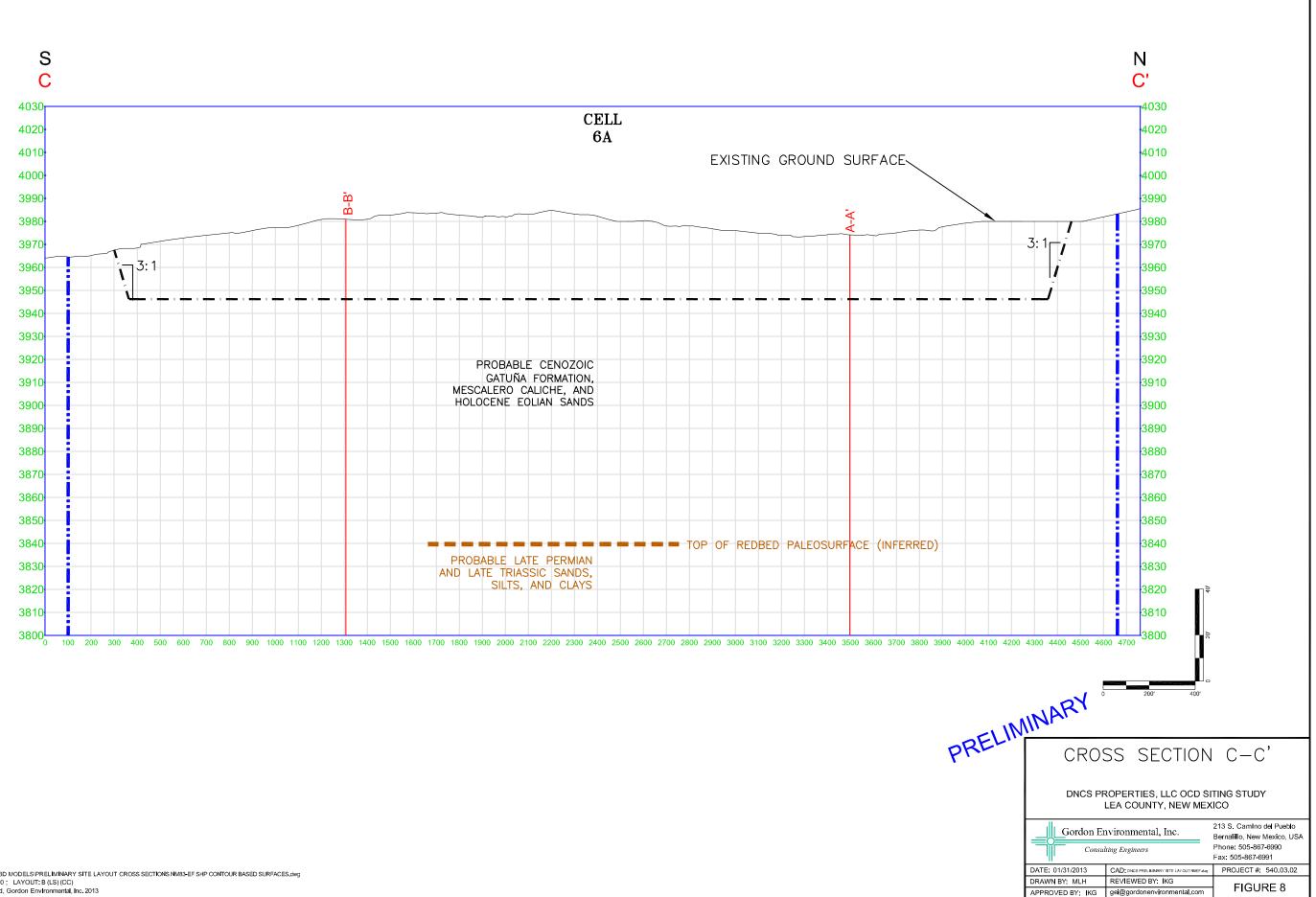
Table 1.--Major stratigraphic and time divisions, southeastern New Mexico (Time divisions from Berggren, 1972, in part.)

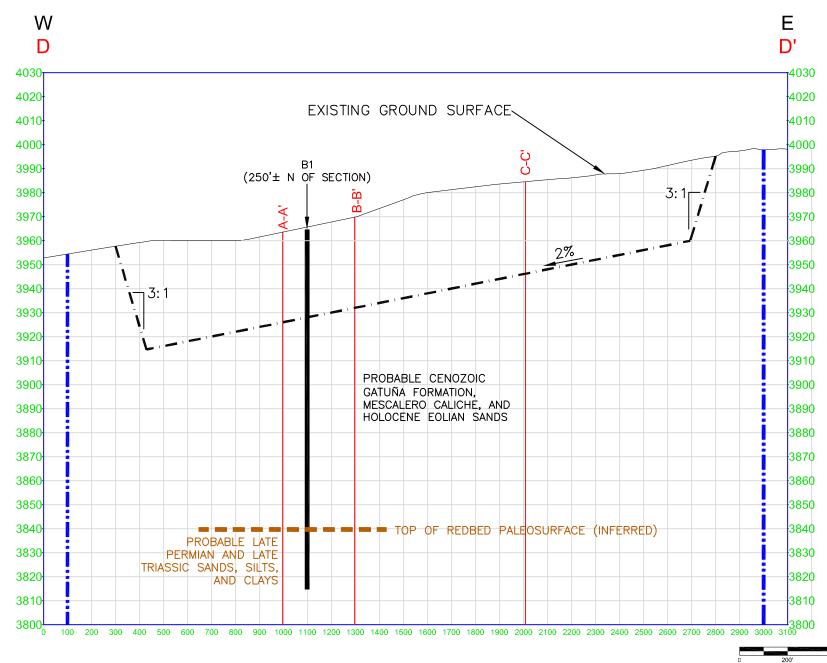






Drawing P:\acad 2003\540.03.02\C3D MODELS\PRELIMINARY SITE LAYOUT CROSS SECTIONS NM83-EF SHP CONTOUR BASED SURFACES.dwg Date/Time:Jan. 31, 2013-09:04:40 ; LAYOUT: B (LS) (BB) Copyright © All Rights Reserved, Gordon Environmental, Inc. 2013





EXISTING BORING B1 PROJECTED

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The second secon	INARY		
PREL	CROS	SS SECTION	D-D'
		ROPERTIES, LLC OCD SI LEA COUNTY, NEW MEX	
	Gordon Er	vironmental, Inc.	213 S. Camino del Pueblo Bernalillo, New Mexico, USA
	Consul	ting Engineers	Phone: 505-867-6990 Fax: 505-867-6991
	DATE: 01/31/2013	CAD: DNCS PRELIMINARY SITE LAYOUT NMEE.dwg	PROJECT #: 540.03.02
	DRAWN BY: MLH	REVIEWED BY: IKG	FIGURE 9
	APPROVED BY: IKG	gei@gordonenvironmental.com	I FIGURE 9

APPLICATION FOR PERMIT DNCS ENVIRONMENTAL SOLUTIONS

VOLUME IV: SITING AND HYDROGEOLOGY SECTION 2: HYDROGEOLOGY

ATTACHMENT IV.2.B

LOGS OF GEOTECHNICAL BORINGS AT THE DNCS SITE

	nvironmental, Inc.	Log of Borehole No.: B3	Total Depth		
Cons	ulting Engineers	Client: DNCS PROPERTIES	-		Ro-No.: 542.01.01
	Location COORDS's and Elevation (NAVD88)	Date-Started: 02-06-2013	Borehole Information		
NONE Ft. While Dr		Date Comp: 02-08-2013	Drilling Co.: PRECISION SA		ET Rep.:MLH
(below ground surfac	e) E: -103.70411	Location: DNCS SITE, LEA COUNTY	Rig Type: CME 8	Ľ	Drill Meth.:
NONE Ft. at complete	tion Elevation: 3940.23	<u>SE/4, N/2, SEC 6,</u>	Driller: JUAN BARRA	ZA s	ampling Meth.: SS/BR/CC/ARC
water level data approxim		T18S, R33E, N.M.P.M.	Helper: TINO V.		
	mpling lethod			Rig	
BGS) Lithology		Soil/Lithology Description	n	Blow Counts/ft	Notes:
0.	0-1' SAND, FINE	AND SILT; BROWN (WINDBLOWN,	LOOSE)		UNCONFORMITY AS BASE OF DUNE SHID
		, AND CALICHE LIGHT BROWN (7.5YR 6/4), (POORLY		VARMELY CALICHEFIED FROM 4"
5'	IGRADED; POORLT I	O MODERATELY INDURATED)			
	5'-10'. SAND: FIN	IE, WITH CALICHE AND TRACE G	RAVEL TO 1": PINK	13	
- 20		RLY GRADED; POORLY TO MODE			
10'				33	
	in and a second se				
					SPARSE GRAVEL TO 2"; ABUNDANT CALCHE FRAGMENTS
15'				31	
		NE, WITH SILT, CALICHE FRAGME K (5YR 8/3), (POORLY GRADED			
20'	MODERATELY INDUR				
				23	
25'				45	
	Ar an Generalization				
30'					
				29	TRACE GRINEL TO 0.5" DIA.
	GRAVEL TO 3.5"; L	ine, with silt, caliche fragme Ight Reddish brown (5yr 6/4), (POORLY GRADED;		
35'		ATELY INDURATED/CALICHEFIED)		20	
					TRACE GRIMEL TO 3.5" EM.
40°				32	
					NCREASE IN CONSEE SNID AND CRIMEL-
45' 🗸 🔹	UNCONFORMITY				O CONTACT WITH UNDERLYING CLAYSTONE AND SELTSTONES
				58	CLAINSTONE AND SELECTIONE BECKING & 45 GRAVEL-TO 2 - DR. (ABUNDANT-WEATHERED EMELLIS ECCK TEEDINARY ACCO SERVICE BU
		NE AND SILTSTONE; WITH CALICH			INCLUSING ROCK [TERDARY AGE) SERIA BL VOLCANEST] AND LINESTONE CLASTS AT TO OF CLASTICHE-SILSTONE CONDET / UNCONFORMETS
50'	GRADED; MODERATE	0 2°; REDDISH BROWN (2.5YR	5/4), (POORLY	100+	
	GIADED, MODERAIE				
55'				100+	
30' S					HOLE CHECKED FOR WITER AFTER SITTING OVERSHONT (13.8 HOLRS), NO WITER
	ROUNDED GRAVEL T	VE AND SILTSTONE; WITH CALICH 0 2"; REDDISH BROWN (2.5YR 4	E FRAGMENTS, AND 4/4) AND VARIFGATED	95	DOIN-HOLE
	BROWN TO GREENIS	H LAYERS AND SPOTS (POORLY	GRADED; MODERATELY		
65' -	INDURATED)			84+	
70'					
		IE AND SILTSTONE; LIGHT RED (TO GREENISH LAYERS AND SPO		93+	SURCHING TO ARE TODAY DISLING AT 90" BOS, NO MORE CONTINUOUS CORDIO
	MODERATELY INDURA		IS (FUURLI GRADED;		
75'		KEY			
BGS = BELOW GRO	UND SURFACE SS = SPLIT S M AUGER DRILL LOGS\B3 DNCS.dwg		TTINGS AC = AUGEI	CUTTING	S CC = CONTINUOUS CO

÷.

				Log of Borehole No.:	B3		Total Depth	150'		Page 2 of 2
=			onmental, Inc.				10tar Depui _	1.50	-	
		Consulting E	ingineers	Client: DNCS PRO	OPERTIES		1.0		Porci No.:	542.01.01
Wa	ter Level I	Data	Location COORDS's and Elevation (NAVD88)	Date Started: 02-06	-2013	E	ple Information PRECISION SAI		CEL Part -	MLH
NON	E Ft. Whil	e Drilling	f	Date Comp: 02-08	-2013		CME 85			HSA, AIR ROTARY
	w ground su		E: -103.70411	Location: DNCS SITE, LEA SE/4, N/2, SEC		Rig Type:	IUAN BARRAZ		Drill Meth.:	55 /89 /00 /AB0 /A/
(below	E Ft. at con w ground su	urface)	Elevation: 3840.23	T18S, R33E, N.M		Dinki		¹	Sampling Meth	SS/BR/CC/ARC/AC
water	level data app	Sampli	COORD REF SYS WGS84			Helper:	TINO V.	Rig		10
Depth (ft. BGS)	Graphic Lithology	Metho	đ	Soil/Lithology	Description	n		Blow Counts/:	a	Notes:
			-70'-85', (CONTINUE	D) CLAYSTONE AND SI	LTSTONE;	LIGHT RED	(2.5YR	160+	BRASS RING SAM SMALL DAMAGED RECOVERED.	PLER BROKE DOWN-HOLE ; BRASS RING SAMPLE
1-40			GRADED; MODERATEL	TED BROWN TO GREENI	SH LAYEI	rs and spo	TS (POORLY		ORELLHOLE CHECK OVERNIGHT, NO Y	ED FOR WATER AFTER SITTING WTER.
-80'				······				100+	NEW "NIME" INST	ALLED FOR SS SAMPLES
-85'			5-60 							
				AND SILTSTONE; PALE				100+		
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		MODERATELY INDURA	TO GREENISH LAYERS (TED)	AND SPI	NS (POUKL)	GRAUED;			
-90'								100+	SOME MITON-CALC	TTE VENLETS AND PARTING
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$									FOON SAMPLING ONLY MGS FROM DO.25" TO 150"
-95'	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	()							805	
	$ \begin{array}{c} 0 & 0 \\ 0 & 0 $		90'-110', CLAYSTON	IE AND SILTSTONE; LIG TO GREENISH LAYERS	HT RED	(2.5YR 7/8)	, AND	19-1-20-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-		
1002	$ \begin{array}{c} \begin{array}{c} c c c c c c c c c c c c c c c c c c $		- MODERATELY INDURA		AND SPU	JIS (PUORE	GRADED;			
100'										
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Short Adda						-	
105'										
			_							
110'	$\begin{array}{cccccccccccccccccccccccccccccccccccc$									
			110'-115', CLAYSTO	NE AND SILTSTONE; LI	GHT RED	(2.5YR 7/8	i), AND			
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		- VARIEGATED BROWN - MODERATELY INDURA	TO GREENISH LAYERS	AND SPO	TS (POORL)	GRADED;			
115'									_	
			- 	NE AND SILTSTONE; RE		DOWN (2 5V	P 5/A)			
120'	$\begin{array}{c} c_{1} \ c_{2} \ c_{2} \ c_{3} \ c_{4} \$		-AND VARIEGATED BR	OWN TO GREENISH LAY	ERS AND	SPOTS (P	DORLY			
			- GRADED; MODERATEL	Y INDURATED)						
1057										
125'										
130'			_							
135'										
			-125'-150'=TD, CLAY	STONE AND SILTSTONE TO GREENISH LAYERS	RED (2	.5YR 4/8),	AND			
			MODERATELY INDURA		AND OPL	IS (FOURL)	GIVIDED;			
140'										
									DRILLHOLE WATER AFTE	CHECKED FOR
145'									OVERNICHT;	
									ANY MATER	AL ON AUGERS LUGGING HOLE.
150'									TD=150'	
BGS			SURFACE SS = SPLIT S				AC = AUGER			CONTINUOUS CORE
	+ HOLLOW			BR = BRASS RING (SPLIT	BARREL 1	NODIFIED CALI				
urawing:P:\a	icao ∠003\542.(UT.UTVURILL I	OGS\B3 DNCS.dwg				Date/Ti	me:May. 31.	2013-08:54:09; LA	ATOUL: A (P)(p2 of 2)

Consulting Engineers	Client: DNCS PROPERTIES, LLC		POLO No.: 542.01.01
Location COORDS's	Borehole Informatio	n	<u>)</u>
Water Level Data Elevation (NAVD	88) Date Started: 02-08-2013 Drilling Con PRECISION-SA	MPLING G	EFRep.:MLH_
NONE Ft. While Drilling N: 32.77700	Date Comp: 02-09-2013	5	HSA. AIR ROTARY
(below ground surface) E: -103.69465	Location: DNCS SILE, LEA COUNTY Rug Type.	D	rill Meth.:
NONE Ft. at completion Elevation: 3968.	2 CENTRAL SEC 6, Driller: JUAN BARRA	Si Si	ampling Meth.: SS/BR/CC/A
water level data approximate COORD REF SYS WCS			
Sampling		Rig	
Depth Graphic Method fl. BGS)Lithology S R C 2	Soil/Lithology Description	Blow	Notes:
O-2' SAND F	INE AND SILT; BROWN (WINDBLOWN, LOOSE)	Counts/ft	Notes:
a second a second s	· • · •		LINCONFORMTY CALICHERED FROM 4" TO 40"
MODERATELY IN	FINE, RED (2.5YR 4/6), (POORLY GRADED; POORLY TO DURATED/CALICHEFIED)		
5' States and States a		84+	· · · · · · · · · · · · · · · · · · ·
	HE AND SAND; FINE, WHITE (2.5YR 8/1), (POORLY		
	RATELY INDURATED)		
10' 100000		82+	
	CHE AND SAND; FINE, PINKISH WHITE (2.5YR 8/2),		
·······························	D; MODERATELY INDURATED)		
15'			ND SS SHIPLE COLLECTED
15'-20', CALK	CHE AND SAND; FINE, LIGHT REDDISH BROWN (2.5YR 6/4),		
	D; MODERATELY INDURATED)	[
20'		34	
	FINE, AND CALICHE, LIGHT REDDISH BROWN (2.5YR 7/3),	F	
XGRS5CX	D; POORLY TO MODERATELY INDURATED)		
25'		35	
	FINE, AND CALICHE, LIGHT REDDISH BROWN (2.5YR 7/4), D; POORLY TO MODERATELY INDURATED)		
	D; POORET TO MODERATELT INDURATED)		
30'		39	
	FINE, AND CALICHE, LIGHT REDDISH BROWN (2.5YR 6/4), D: POORLY TO MODERATELY INDURATED)		NAE SHOT
	D, FORTI TO MODERATELT INDURATED		
35'		90	ABUNEWIT-ROOT CASTS AND VOIDS
	CHE AND SAND; FINE, PINKISH WHITE (2.5YR 8/2), D; MODERATELY INDURATED)		
issues to a second s		<u> </u>	
40'		84+	
	CHE AND SAND; FINE, AND GRAVEL TO 1"; PINK (2.5YR TO MODERATELY GRADED; MODERATELY INDURATED)		
45' 9	······································		
	CHE, SAND; FINE, AND GRAVEL TO 1°, PINKISH WHITE	93+	
	POORLY TO MODERATELY GRADED; MODERATELY INDURATED)		
50' UNCONFORMITY			UNCONFORMITY
		70	
		[
	STONE AND SILTSTONE; WITH CALICHE FRAGMENTS, AND		
ROUNDED GRAVE	L TO 0.5" AT TOP; DARK REDDISH BROWN (2.5YR 3/4) IEGATED BROWN-PURPLE AND GREEN LAYERS AND SPOTS,		
(POORLY GRADE	D; MODERATELY INDURATED)		
60'	-		
		64+	
65'	······	001	
		90+	GOND TO AR-ROTARY DILLING FROM 65" TO 155" BOS.
	STONE AND SILTSTONE; REDDISH BROWN (2.5YR 4/4) WITH		
	D BROWNPURPLE AND GREEN LAYERS AND SPOTS, D; MODERATELY INDURATED)		
	D, MODERNIELI INDURVIEDJ		
75'	KEY		I
BGS = BELOW GROUND SURFACE SS = SP HSA = HOLLOW STEM AUGER			S CC = CONTINUOUS CC
			· · · · · · · · · · · · · · · · · · ·

	I Gord	on Envi	roni	nental, Inc.	Log of Bo	orehole N	io.: B4			Total I	Depth _	150'	_	$\langle \cdot \rangle$	Page 2 of	2
-		Consulting	_		Client:	DNCS	PROPERTI	IES,					POrc	No.:	542.01.0)1
	ter Level I			ocation COORDS's and Elevation (NAVD88)			2-08-2013			ehole Info : PRECISI			GEI Rep.:		MLH	
(below	E_Ft. While w ground su	urface)	E	-103.69465°	_	NCS SITE	2-09-2013	<u>v</u> F	Rig Type:_	C JUAN E	ME 85		Drill Meth.	: <u></u>	ISA, AIR ROTAI	
(below	E Ft. at co w ground su level data app	urface)	E	levation: 3968.2		NTRAL : , R33E,	N.M.P.M.		Driller: Helper:		0 V.	<u> </u>	Sampling N	/leth.:	SS/BR/CC	<u>/ N</u>
Denth	Graphic	Samp	ling		s	oi]/Lithe	logy Descript					Rig Blow				
75'	Lithology	S K Č	<u>3</u> 3									Counts/			otes: COREY, NO MORE	: AC
-80'				75'-85', CLAYSTON SPARSE VARIEGATED (POORLY GRADED; M	BROWN-F	URPLE	AND GREEN	BRO I LA	WN (2.5 YERS AN	57R 5/4) ND SPOTS) with S,					
85'		·····	E													
90'				85'—95', Clayston Sparse Variegated (Poorly graded; P	BROWN-F	URPLE	AND GREEN	1 LA	YERS AN							
95' 100'				95'-100', CLAYSTO VARIEGATED BROWN- GRADED; MODERATEL	-PURPLE A	ND GRE	e; red (2.5 En layers	5yr 5 An	5/6) W D SPOTS	/ith spai s, (poor	rse Ily					
105'				100'-105', CLAYST VARIEGATED BROWN- GRADED; MODERATEL	-PURPLE A	ND GR	ne; red (2 Een layers	2.5yr 5 an	: 5/8) D SPOT:	WITH SP/ S, (poor	ARSE RLY					
110'				105'—115', Claysti With Sparse Varieg Spots, (poorly gr	GATED BRO	WN-PU	RPLE AND (GREE	rown (2 En laye	2.5yr 5/ Rs and	(3)					
115'				115'-120', CLAYSTO VARIEGATED BROWN- GRADED; POORLY TO	-PURPLE A	ND GRE	EN LAYERS									
120'																
25'				130'—130', CLAYSTO VARIEGATED BROWN— GRADED; MODERATEL	-PURPLE A	ND GRE										
- 30'				130'-135', CLAYST(WITH TRACE VARIEGA (POORLY GRADED; M	TED BROW	N-PURI	PLÉ AND GR									
135'				135'-140', CLAYST(WITH TRACE VARIEGA (POORLY GRADED; PO	ONE AND	SILTSTO	NE; REDDISH	REEN	LAYER							
40' 45'				140°−150°==TD, CLA (2.5YR 6/4) WITH TF AND SPOTS, (POORL)	RACE VARII	EGATED	BROWN-PU	IRPL	E AND (Brown Green Li	AYERS		ONE BREAK	STATUS OF THE OWNER	OR EDDER AFTER	
	= Below (= Hollow			RFACE SS = SPLIT SF		ARC =	AIR ROTARY						10-450		Dimitian on a	

Gor	don Enviro	nmental, Inc.	Log of Borehole No.: B5	Total Depth	,		Page 1 of
	Consulting Er	ngineers	Client: DNCS PROPERTIES			Projec No.:	542.01.01
	Data	Location COORDS's and -Elevation (NAVD88)	Date Started:02-10-2013	Borehole Information		<u> </u>	
NONE Ft. Wh		N: 32.78815	Date Comp: 02-11-2013	Drilling Co.: PRECISION SA		EI Rep.:	HSA, AR ROTARY
(below ground		E: -103.69491"	Location: DNCS SITE, LEA COUNTY	Rig Type: CME 85	Ľ	orill Meth.:	
NONE Ft. at c	ompletion	Elevation: 3979.03	EAST CENTRAL SEC 31,	Driller: JUAN BARRAZ	A s	ampling Meth.:	SS/BR/CC/A
water level data ap		COORD REF SYS WGS84	T17S, R33E, N.M.P.M.	Helper: TINO V.			
Depth Graphic	Samplin Method				Rig Blow		
a. BGS) Litholog			Soil/Lithology Description	1	Counts/ft		Notes:
		0-3' SAND, FINE /	ND SILT; BROWN (POORLY TO I	MODERATELY INDURATED		"BEFORD" SOL, HOR SMO HAS BEEN R	ezont o-j bes, most Emoned by memory fre
			D SAND; FINE, WHITE (5YR 8/1), (POORLY GRADED,		NCONFORMTY	
-5'		MODERATELY INDURA			100+	SUIDHOLY CALCHE	RED FROM 3' TO 10'
		GRADED; MODERATEL	ND SAND; FINE, PINKISH WHITE Y INDURATED)	(5YR 8/2), (POORLY			
10'							-
					44		
15'		(POORLY GRADED: N	E, AND CALICHE; LIGHT REDDISH IODERATELY INDURATED)	BROWN (2.5YR //4),	23		
			,			1 maarta aanta	
20'	<u></u>						
		20'-25', CALICHE A	ND SAND, FINE, AND GRAVEL TO	0.5"; PINKISH WHITE	42	TRACE MICK STUD	ED SPOTS TO Jama DM
õ.		_(5YR 8/2), (POORL)	GRADED; MODERATELY INDURA	IED)			
25'		_			29		
						1	
30'							
					36	1 (A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-	
			E, CALICHE, GRAVEL AND CALCI			1	
35' • • •		_(5TR //4), (POURL)	GRADED; MODERATELY INDURA	ED)	100+	NOUT CREATE VEHI PEDDOENIC - HONIZO	lets, vexturnets and "-34" (Unconformity (N7)
						1	
40'							
					60		
	š	and any				-	
45'					74+		
			E, CALICHE AND GRAVEL TO 2"; (POORLY GRADED: POORLY TO			-	
50'		INDURATED)	,				
		50'-55', CALICHE, S	AND, FINE, AND GRAVEL TO 2"	PINKISH WHITE	88+		
		(2.5YR 8/2), (POOR	LY TO MODERATELY GRADED; M	ODERATELY INDURATED)			
55'					100+	INNER WEIGHT PR	10812015 (73271)
			, Caliche, and gravel to 2"	TRACE CLAY AND SHT			
5 0'		0 64-65'; Light Ri	EDDISH BROWN (2.5YR 7/3), (F		100 -		
 		- MODERATELY GRADED	, MODERATELY INDURATED)		100+		
65' • • •		UNCONFORMITY			83+	MICH CINEY CAL	TE VENLETS & 65'-66
			e and siltstone; with calich				
70'			5YR 3/3) WITH SOME VARIEGATI AND SPOTS, (POORLY GRADED;		100 -		NY DIRLING
		INDURATED)	AND STUIS, (FUURLI GRADED;		100+	FROM 70-TO-150	- 508.
						ļ	
75'	1		KEY			<u>. </u>	

	Gor	don Envi	ronmental, Inc.	Log of Bore	ehole N	o.: B5		Total Depth	150'	-	Page 2 of	2
		Consulting	Engineers	Client:	DNCS	PROPERTIE	s, llc			Project No.:	542.01.01	
			Location COORDS's and	d			Bore	hole Information	n	0,		_
	ter Level		Elevation (NAVD88)			2-10-2013	Drilling Co.	PRECISION SA	MPLING	GEI Rep.:	MLH	
	E Ft. Wh	ile Drilling surface)		Date Comp:		-11-2013 LEA COUNTY	Rig Type:	CME 8	5	Drill Meth.:	HSA, AIR ROTARY	
NONE	•••••••••••••••••••••••••••••••••••••••	ompletion	A.,	EAST C	ENTRAL	. SEC 31,	Driller:	JUAN BARRA	ZA	Sampling Meth.:	SS/BR/CC/A	<u>UR</u>
water l	level data ap			1175,	KJJE,	N.M.P.M.	Helper:	TINO V.				_
Depth BGS)	Graphic Litholog	Sampl Meth	od	Soi	l/Litho	logy Descriptio	on		Rig Blow Counts		Notes:	
/9			75'-80', CLAYST SOME VARIEGATED (POORLY GRADED;	BROWN-PURI	PLE AN	ID GREEN LA	(2.5YR 4/ YERS AND	2) with spots,	100+			
80'												
85'			80'-95', CLAYST WITH SOME VARIE((POORLY GRADED:	GATED BROWN	-PURF	PLE AND GRE						
90'	$\begin{array}{c} - \cdots + 0 \\ - \cdots + 0 \\$			MUULIVAIELI	nuur							
)5'												
00'			95'-105', CLAYS VARIEGATED BROW GRADED; MODERAT	N-PURPLE AN	ID GRI							-
05'				STONE AND S	11 7570) EVD 5 (4)				
10' 15'			- 103 - 113, CLAI - WITH SOME VARIEO - (POORLY GRADED; -	GATED BROWN	-PURF	LE AND GRE						1947 1948
20'	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		= 155'-120', CLAY 6/4) WITH SOME SPOTS, (POORLY (VARIEGATED B	ROWN-	-PURPLE AN	D GREEN L					
25'	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array} \\ \end{array} \\ \end{array} \\$		120'-125', CLAY WITH SOME VARIED (POORLY GRADED;	GATED BROWN	-PURF	LE AND GRE	BROWN (2 EN LAYERS	2.5YR 5/3) AND SPOTS,				
30'			125'-135', CLAY SOME VARIEGATED (POORLY GRADED;	BROWN-PURI	PLE AN	ID GREEN LA						
35'			135'-140', CLAY WITH SOME VARIED (POORLY GRADED;	ATED BROWN	PURP	LE AND GRE						
10' 15'			140'-150'=TD, C SOME VARIEGATED (POORLY GRADED;	LAYSTONE AN BROWN-PURI	d silt Ple an	STONE; RED ID GREEN LA					é for water after st TD; obstyred aller MCB MCBUL on alle	
50 ⁻¹ BGS =	= BELOW	GROUND	U SURFACE SS = SPLIT AUGER		ARC =	AIR ROTARY C		AC = AUGE LIFORNIA SAMPL		TD-150	CONTINUOUS CO	_

DNCS Pr 	₩M -	SAMPLING METHOD: HEILOW Sten	V	2.						DF	6	Alex Backen
HING 320 (NG: -\03° M: amsl MA TION: RIG: (MT2- E: 90	16.1 5.4.1 " 42' 37.1" 9 83 75 BEARING:		WATER LEVEL TIME DATE CASING DEPTH d blom fine sand i	2014	2/2		P.45	رعار	ne/.	092 DATE	11:00	A-vilcues
(ELEVATION) WELL Sample COMPLETION	(i.e., angularity. moisture	SAMPLE NUMBER AND DESCRIPTION OF MA HCL reaction, cementation, max. particle size, gravel/cobb		% OVERSIZE ¹	% GRAVEL ²	% SAND ²	% FINES ²	COLOR	CONSISTENCY ^{3/} CEMENTATION ⁴	Partoricity (np. l, m, h)	Blews OTHER TESTS	DRILLING CONTRACTOR TIPE 15 100
z 5-6 1Pht 500	2-7 5	Bry to'c", Fine wind blow ind, Fine, virth Caliche Gauels tol 1, Light Bri Dry- Poorly Graded, Tourly to	own (7.54R6/4) Mud. Indurctal								23 22	
10-11. 5711t 57000 13	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	d, Fine, with Glichet to I". Readdish Brown, o Poorly Graded, Poarly to Facturated / Gliche Fiel. I, Fine, with Calichet tol". Reddish Yellow (7.5	(7.57K6/6) Moderately Dry. Some Gmill 727/4)								20 43 46 23 50+	LOGGED BY: Michael Pottrees
split Spec 20-21 Split Split	5	Well Gradeal, Moderately Caliconiticals Dry-									21 52 17	гое ,
25-2 27 571it 5700	77-48 600	l, Fine, with filt & Calich nato l". Light Brown srly Graded, Poorly Inducate	e, Taxa Cirevels (7.57R614) d. Dry.								55	108 NO. 130 04414
30-3 51.t 5700											23	

VCS Goldon SAMPLING METHOD: 1.5" 10 3plot spuson Isi Isi SURFACE CONDITIONS: CASING DEPTH BEARING: - SURFACE CONDITIONS: SURFACE CONDITIONS: SURFACE CONDITIONS: Isi Isi Isi CASING DEPTH Isi Isi Isi	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	WATER LEVEL	WATER LEVEL	ZE1	GRAVEL ² SAND ²	SAND ²		% FINES	COLOR	CONSISTENCY ³ / CEMENTATION ⁴	STAR 9:20 DATE GCU	T FINISH	~ Sampling - Al
27-48 Sand, Frey Wolt Lipto 1". L	Lipto I". L Poorly Fre * Finely lay 35' Sim	pto I". L Corly Fre Finely lay 35' Sim	wht Brown hun-ted, gread (Z-s ular 50,1	(7.5 YR 6/4) Dry - mm) horrzons beynny choracter retres,		0 %	S %	× 1	COL	CEO.		18 19 14 10 10 10 11 22 50 1 23	
55 Fold	-61.5 + 5 produ -66.5 + 5 pron + 5 pron + 5 pron 5 = 7,1 -55 R Ins	Ĩ	vity stone and soltste regments, Derti Reddis ourly to moderately Fodwrater, Bry- ecoury from Brass splitspoon sample	Graded, Noderetely								12 30+ 70+	1200 C/ . 00 BOL

APPLICATION FOR PERMIT DNCS ENVIRONMENTAL SOLUTIONS

VOLUME IV: SITING AND HYDROGEOLOGY SECTION 2: HYDROGEOLOGY

ATTACHMENT IV.2.C SELECTED WELL DATA FROM WELLS IN THE VICINITY OF THE DNCS SITE (GEOHYDROLOGY ASSOCIATES, 1978)

COLLECTION OF HYDROLOGIC DATA EASTSIDE ROSWELL RANGE EIS AREA

^{by} Geohydrology Associates, Inc.

NEW MEXICO

for

BUREAU OF LAND MANAGEMENT

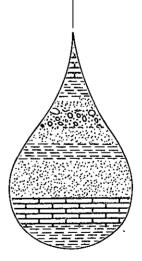
Denver, Colorado

Contract No. YA-512-CT7-217

1201 Childers Dr., N. E., Albuquerque, N. M. 87112 505-293-6971

3225 Candelaria Rd., N.E., Albuquerque, N.M. 87107 505-345-5713

June 1978



COLLECTION OF HYDROLOGIC DATA EASTSIDE ROSWELL RANGE EIS AREA NEW MEXICO

by GEOHYDROLOGY ASSOCIATES, INC. Albuquerque, New Mexico

for BUREAU OF LAND MANAGEMENT Denver, Colorado

Contract No. YA-512-CT7-217

June 1978

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LEA COUNTY

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Location	Well Status	Altitude (feet)	Depth of Well(ft.)	Depth to Water(ft.)	Aquifer	Date of Measurement	Remarks
$\begin{array}{r} 16.38.30.211\\ 30.31111\\ 30.41334\\ 31.24434\\ 32.42113 \end{array}$	Irrigation Irrigation Irrigation Used windmill Irrigation	3755 3749 3737 3722	118.0	57.48 56.29 58.74 66.44 81.72	Og11 Og11 Og11 Og11 Og11 Og11	Jan.7,1975 Feb.17,1971 Feb.17,1971 Feb.18,1966 Feb.17,1971	
34.131 34.131 35.110 35.124114 35.21112	Irrigation Irrigation Used well Irrigation Irrigation	3693 3694	140.0	61.22 97.42 41.33 62.92 62.34	Og11 Og11 Og11 Og11 Og11 Og11	Mar.18,1958 Jan.7,1975 Jan.6,1952 Feb.11,1971 Feb.11,1971	•
35.33122 16.39. 5.31132 6.31111 7.33132 17.311142	Irrigation Abandoned irrigation Irrigation Irrigation Irrigation	3702 3702 3704 3695 3685		71.68 62.98 45.09 54.85 69.03	Og11 Og11 Og11 Og11 Og11 Og11	Feb.11,1971 Feb.12,1971 Feb.12,1971 Feb.12,1971 Feb.12,1971 Feb.11,1971	
17.34422 19.133121 20.13311 20.31111 20.41143	Irrigation Irrigation Irrigation Irrigation Open cased hole	3680 3684 3673.02 3673	132.0	75.90 57.76 54.74 60.50 68.84	Og]] Og]] Og]] Og]] Og]]	Feb.11,1971 Feb.11,1971 Feb.26,1963 Feb.26,1963 Feb.11,1971	
29.23332 29.343344 30.11413 30.43424 17.32. 1.32343	Irrigation Irrigation Irrigation Abandoned stock Irrigation	3678.7 3681 3682 3661 4225	172.0	83.54 77.22 60.30 51.89 165.85	Og]] Og]] Og]] Og]] Og]]	Jan.7,1975 Feb.11,1971 Feb.11,1971 Feb.15,1961 Mar.15,1966	

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Location Well Status		Altitude (feet)	Depth of Well(ft.)	Depth to Water(ft.)	Aquifer	Date of Measurement	Remarks,
· ·	,						
17.32. 1.32343	Used oil test	4225		173.19	0g11	Mar.10,1966	
2.433	Industrial/domestic	4240	200	60	0g11	1948	Yield:50gpm(est)
2.434	Industrial/domestic	4240	192	60	0g11	Jun.1,1950	
2.434343	Industrial	4195	100	148.33	0g11	Mar.14,1961	
2.443	Industrial/domestic		190		0g11		Yield:50gpm(est)
3.13443	Unused industrial	4239		168.14	0g11	Feb.10,1966	
3.140	Industrial				0g11	-	
3.320	None	4250		175.6	0g11	Jul.21,1954	
3.32114	Industrial	4232		162.21	0g11	Feb.8,1971	Oil test
3.43333	Industrial	4200		136.89	0g11	Feb.8,1971	
4.442	None	4180		82.9	Qta]	Jun.3,1954	
11.231	Industrial/domestic	4180	139		0g11	•	
11.233	Industrial/domestic	4200	140	70	0g11 ?	Sep.20,1947	Yield:9gpm(est)
11.34332	Open hole	4096		47.11	0g11	Feb.8,1971	
11.411	Industrial/domestic	4170	200	70	0g11 ?	Jun.15,1946	Yield:90gpm(est)
11.411	Industrial/domestic		130	70	0g11 ?	Sep.23,1947	Yield:50gpm(est)
12.44414	Abandoned stock	4168		120.13	0g11	Feb.11,1966	
14.12121	Domestic	4092		31.53	0g11	Feb.8,1971	
17.33. 3.14134	Unused	4184		146.98	0g11	Feb.14,1966	
4.241441	Oil test	4183		159.58	0g11	Feb.18,1971	
4.44322	Unused	4179		149.72	0g11	Feb,6,1961	
4.4444	Shot hole	4173	152.0	145,20	0ğ11	Mar.14,1961	
5.22221	Industrial	4198		162.20	0g11	Mar.31,1971	
6.11111	Used floodwell	4198	310.0	209.87	0g11	Mar.31,1971	
6.42411	Unused	4223		181.94	0g11	Feb.18,1971	
	•	,			-		

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Location Well Status		Altitude (feet)	Depth of Well(ft.)	Depth to Water(ft.)	Aquifer	Date of Measurement	Remarks
17.33.7.141221 7.323221 9.342113 12.24333 13.341	Open hole Open hole Open cased hole Used windmill Observation	4234 4229 4191 4118 4124	252	192.54 188.61 171.39 122.79 165.46	Og11 Og11 Og11 Og11 Og11 Og11	Feb.15,1971 Feb.15,1971 Feb.15,1971 Feb.16,1971 Jan.8,1975	
13.434 16.24242 18.22133 18.322 18.3223	Industrial Stock Domestic Industrial/domestic Industrial	4123 4176 4216 4230 4224	220	175.54 165.43 182.83 196.59	Og11 Og11 Og11 Og11 Og11 Og11	Jan.17,1961 Feb.11,1966 Feb.15,1971 Mar.13,1961	
20.221443 20.24143 22.43233 23.3132 25.244	Open hole Used windmill Used windmill Open cased hole Industrial	4165 4173 4140 4143	160.0 230.0	147.39 163.45 155.17 157.62 140.07	Og11 Og11 Og11 Og11 Og11 Og11	Mar.14,1961 Feb.15,1971 Feb.16,1971 Feb.16,1971 Jan.3,1967	
26.422 28.110 29.222221 29.34411 30.12432	Abandoned industrial None Industrial Used oil test Domestic	4125 4185 4188 4044 4053	200.3 241	162.35 198.0 201.35 61.43 69.14	Og]] Og]] Og]] Og]] Og]]	Sep.7,1956 May 11,1954 Mar.14,1961 Feb.16,1971 Feb.16,1971	
33.4224 17.34. 2.1310 2.343442 4.4320 7.213242	Open cased hole Used windmill Abandoned Used windmill Open cased hole	4082 4057 4048 4079 4123		130.96 85.94 86.15 99.79 130.33	Og11 Og11 Og11 Og11 Og11 Og11	Feb.16,1971 Feb.16,1971 Feb.16,1971 Feb.16,1971 Feb.16,1971 Feb.16,1971	

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,

Location	Well Status	Altitude (feet)	Depth of Well(ft.)	Depth to Water(ft.)	Aquifer	Date of Measurement	Remarks
17.38.21.41211	Irrigation	3682	112.0	48.23	0g11	Feb.3,1971	
23.111141	J	3673.9		48.0	0g11	Aug.3,1971	
27.133	Irrigation		125.0	33.92	0g11	Jan.23,1962	
30.113	Used well			37.10	0g11	Jan.11,1957	
30.12111	Irrigation	3704		56.97	0g11	Feb.3,1971	
30.312			56.0	41.12	0g11	May 22,1953	
31.21111	Irrigation	3691		56.97	0g11	Feb.3,1971	
31.31111	Irrigation	0001	110.0	50.32	0g11	Jan.7,1975	
31.41422	Irrigation	3684	110.0	59.61	0g11	Aug.3,1971	
32.232432		3689		66.90	0g11	Feb.3,1971	
021202102		0000		00.90	Ogii	160.3,13/1	
34.113	Irrigation	3660	126.0	48.18	0g11	Jan.7,1975	
35.14413	Irrigation	3659		56.93	0g11 .	Feb.4,1971	
36.212	Irrigation			68.37	0g11	Jan.23,1962	
17.39.18.13314	Used windmill	3674		78.07	0g11	Feb.3,1971	
18.33242	Irrigation	3663		64.04	0g11	Feb.3,1971	
,					0911	1001031071	
19.31332	Abandoned stock	3648		50.04	0g11	Feb.22,1966	
30.23444	Abandoned irrigation	3657	165.0	66.20	0g11	Feb.22,1966	
31.42121	Irrigation	3640		64.39	0ğ11	Feb.4,1971	
32.111	Irrigation			87.78	0g11	Jan.6,1970	
32.41322	Irrigation	3642		80.17	0g11	Feb.4,1971	
					-		•
18.32.16.22433	Uncased open hole	3793	100	84.18	0g11	Mar.18,1968	
20.13311	Domestic	3470	270.0	179.35.	Trcl	Feb.23,1971	
22.32322	0il test	3763 .		434.41	Trc1	Apr.6,1971	
34.22241	Windmill	3721		117.46	Trc1	Apr.6,1971	
18.33. 3.34133	Open cased hole	4015		60.10	Qta1	Apr.5,1966	
					•	• • • • • •	

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Records of wells from Lea County, New Mexico

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Location	Well Status	Altitude (feet)	Depth of Well(ft.)	Depth to Water(ft.)	Aquifer	Date of Measurement	Remarks
18.33. 3.343 10.23244 10.44211 11.4433 12.44211	Domestic/stock Domestic Stock Irrigation Windmill	4012 4005 3985 3986 4089	64 75 60	59.18 41.64 41.64 42.40 137.48	Qta] Qta] Og]] Qta] Qta]	Feb.19,1971 Feb.9,1971 Feb.9,1971 Feb.9,1971 Feb.9,1971 Feb.5,1971	
13.13144 13.44244 14.111 14.1114 14.1114	Open cased hole Open cased hole None Windmill Stock	3968 3973 3965 3976 3976	40.0 46.0	31.85 46.66 35.8 35.20 35.84	Qtal Qtal Qtal Qtal Qtal Qtal	Feb.8,1971 Feb.8,1971 Jun.3,1954 Feb.9,1971 Mar.6,1968	
19.142 23.23140 34.133 18.34. 1.12222 2.223333	Stock Open cased hole None Industrial Industrial	3820 3881 3760 3991 4009	58 200.0	140+ 45.65 177.4 79.70 98.03	Trsc ? Qtal Trsc Ogll Ogll	Dec.9,1958 Feb.9,1971 Dec.9,1958 Mar.6,1961 Feb.4,1971	
4.11124 8.23213 11.43212 12.42333 15.24130	Open cased hole Windmill Industrial Industrial Windmill	4064 4042 4000 3982 4015	211.0 204.0	126.78 104.20 110.78 111.01 103.28	Og11 Og11 Og11 Og11 Og11 Og11	Feb.4,1971 Feb.4,1971 Feb.23,1971 Feb.19,1971 Feb.5,1971	·
18.413212 20.323323 20.323333 22.343 25.13111	Open cased hole Windmill Domestic/stock Uncased shot hole	4076 4015 4020 3977	111.0	143.30 98.92 100.19 109.92 94.88	Og11 Og11 Og11 Og11 Qta1	Feb.5,1971 Feb.5,1971 Mar.6,1968 Jan.8,1975 Mar.9,1961	

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APPLICATION FOR PERMIT DNCS ENVIRONMENTAL SOLUTIONS

VOLUME IV: SITING AND HYDROGEOLOGY SECTION 2: HYDROGEOLOGY

ATTACHMENT IV.2.D NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORDS FOR WELLS IN THE VICINITY OF THE DNCS SITE

SECTION

TOWNSHIP 175

RANGE

32E



STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Section 1	, (A) Owner of well	Wator 1100d Assac.	, Inc.	
	Street and Number	3017 Lubbook St. Ft Worth 9,		85
	Well was drilled und <u>NE 4 ME 4</u>	er Permit No. <u>1-2980</u> <u>ME</u> 4 of Section <u>1</u>	and is long and is long and is long and is long and a second seco	ocated in the ge <u>. 32E</u>
# 2 Mar 2-127-2	Street and Number	torO. R. Musslewhite Hox 55 Hobbs,		
	Drilling was commen	nced March 6,	······································	<u> </u>
(Plat of 640 acres)	425			
Slevation at top of casing in fe State whether well is shallow	et above sea level Unk	<u>own</u> Total depth of	f well $\frac{270}{100000000000000000000000000000000000$	200
		ER-BEARING STRATA	pour compresson-	
Section 2	PRINCIPAL WAI	ER-BEARING SIRAIA		

No.	Depth	in Feet	Thickness in	Description of Water-Bearing Formation
140.	From	To	Feet	· · ·
1	210	265	55:	Sand, groy tight
2				
3				
4				
5				

Section 3	a 3 RECORD OF CASING											
Dia	Pounds	Threads	Depth		Depth		preads Depth		These Chas		Perfe	orations.
in.	ft.	in	Top	Bottom	Feet	Type Shoe	From	То				
10 3/1	. 40	8	0	270	270	Shoe coll	ar 122	260				
							·					
					l .			}				

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in I From	Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	. Methods Used
				· ·	
				· · · ·	

Section 5	PLUGGING RECO	RD .	
Name of Plugging Contractor		License No	
Street and Number			
Tons of Clay used			
Plugging method used		Date Plugged	
Plugging approved by:		Cement Plugs were placed as fol	

	No;	Depth	of Plug	No. of Sacks Used
Basin Supervisor		From	То	
FOR USE OF STATE ENGINEER ONLY				
Date Received				
Date Received	×.			
MAN DE SS UN SS UN S: 33				
				· · ·
File No. 2-3980 Use Water F	loog	L	ocation No.	17.32.1.2223

	ı in Feet			
From	To To	Thickness in Feet	Color	Type of Material Encountered
0	1	1	Brown	Soil & rock
1	20	1.9	White	Caliche & rock
20	90	70	Grey	Sandy shale
90	120	30	ħ	Sand
120	150	30	Ħ	Sand, hard
150	165	15	14	gand
165	180	15	Red	Sand
180	185	5	Grey	Sandy shele
185	210,	25	11	Sand
210	265	55	Ħ	Sand, hard tight
265	270	5	Red	Sandy shale
		· · ·	De	$\frac{4257}{\text{pth to K}}$
				No. 17. 32 /. 33.3.22-
i				
	ļ			SOURCE OF ALTITUDE GIVEN
				terpolated from Topo. Sheet
·				stermined by Inst. Leveling
			0	the:
	· ·			
1	1	· · ·		

r

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Muslewhile Well Driller

change the location on map read Sec. 1. 222.33 10

plotted @ 1. 33322 Was

Form WR-23



STATE ENGINEER OFFICE



WELL RECORD +

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

r v		- 41
ч.	ection	- 1
ບ	CCOLUIT	

		(A) Owner of well B.E. Paschall,	
		Street and Number LIZ Central St.	
		City Artesia	StateNov_Maricos
		Well was drilled under Permit No. 1	and is located in the
	-	<u>4</u> 4 of Section <u>4</u>	
		(B) Drilling Contractor C.O. Aldredge	License No.WD. 79
		Street and NumberBox_379	4
	-	City Lovington	
		Drilling was commenced	
		Drilling was completed March 3.	19_60
(Plat of 640 acres)		

Elevation at top of casing in feet above sea level_____ Total depth of well 225 Ft. State whether well is shallow or artesian Shallow _____ Depth to water upon completion 175 Fig.

Section 2

PRINCIPAL WATER-BEARING STRATA

No,		in Feet	Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	192	210	18	Red water sand
2	212	224	12	Brown Water sand
3				· · · · · · · · · · · · · · · · · · ·
4			-	65% y
5				55 g.c.,

Sec	

RECORD-OF CASING

Section 3	}			RECOR	D'OF CAS	SING	•	
Dia	Pounds	Threads	Depth		Feet	Type Shoe	Perforations	
in, ft.		in	Top	Bottom	reet	TAbe pune	From	То
8"		wolded	0	225	225	Collar	182	225
	-				N		Gravel paci	ked
						- ,	· ·	

Section 4

RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Diameter	Tons	No. Sacks of	Methods Used
From	То	Hole in in.	Clay	Cement	
		12		•	10 sacks mud used
· · ·					

n		æ
- 74	ection	Ð

PLUGGING RECORD

Name of Plugging Contractor.	سبب فيسمبين	License No.	
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used	Type of roughage	
Plugging method used		Date Plugged	
Plugging approved by:	· · · ·	Cement Plugs were placed as follow	

Cement Plugs were placed as follows:

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE ENGINEER DNLY				
Ligen WUK SZ UN 8: 55				
· · · · · · · · · · · · · · · · · · ·	Da	En(. L(ceation No.	17.32.1.32343

:	Section 6				DF WELL			
-	Depth i From	in Feet To	Thickness in Feet	Color	Type of Mate	erial Encountered		
	0	2	2	Oray	Surface soll	· · ·	• • • •	
	. 2	5	3 :	White	Caliche rock			
-	5	70	65	Red	Sand	·····		
•	70	IIO	hO	Brown	Sand	······································		
•	TIO	125	15	Brown ·	Sand rock		·	
			}	1		>		
	IIB	192	67	Brown	sand			
	192	210	18	Red	Water sand	· ·	<u>. </u>	
	210	212	2	Red	Shale			
	212	224 ×	12	Browd	Watov sand			
	2 ²]ı	225	I	Red	Shale	· ·	·	
	10-20				· · · · · · · · · · · · · · · · · · ·		<u>. </u>	
j.,		· · · · · ·	·	· · ·				
			}				<u> </u>	
			iiiiiii-	L S Elev	4225	·····		
•				Depth to K	Trc 400 1	······································		
-				Elev of K	IFC 700 /	<u> </u>	<u>.</u>	
		:	1	· · ·			·	
					2.1. 32343			
					X Field Check	,	-	
	<u> </u>							
			<u>; , , ;</u>		and the second			
		· · · · · · · · · · · · · · · · · · ·			OF ALTITUDE GIVEN	<u></u>		
				Interpolated f	om Topo. Sheet	, , , , , , , , , , , , , , , , , , ,		
	<u>. </u>		<u> .</u>	Determined t	by Inst. Leveling		<u> </u>	
			ļ	Other				
	<u></u>			·			<u> </u>	
						· · · · · · · · · · · · · · · · · · ·		
		· · · · · · · · · · · · · · · · · · ·		·, ·			····	
		-		<u> </u>				
-	The unders	igned here	by certifies t ve described	that, to the best of h	is knowledge and belief, th	he foregoing is a true and	cor	
	Tect Tecora	or me apo	ve descriped	, Weill	L. D. M.	alle alle alle alle alle alle alle alle		
					C.C. IV	ell Driller		
¢,					•			
÷.	* <u>*</u>	4		· . · .		and the second	•	
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Form WR-23



STATE ENGINEER OFFICE WELL RECORD



INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

~		•		-
~	ect	11	m	

	(A) Owner of well $\frac{1}{1000} \frac{1}{1000} $	د V ه
	Street and Number 10X 122	
	Well was drilled under Permit No.11.3920 -X	wp. 1.7Rge
	(B) Drilling Contractor Level all receive	License No
	Street and Number 202 273	
	City LOV_steriou.	. State
	Drilling was commenced Sept. Zi	19.02
	Drilling was completed Oct. 12	<u>19 02</u>

(Plat of 640 acres)

Elevation at top of casing in feet above sea level <u>4242</u> Total depth of well <u>255</u> State whether well is shallow or artesian $S_{1,41+0,00}$ Depth to water upon completion <u>475</u>

No.	Depth in Feet		Thickness in	Description of Water-Bearing Formation			
	From	То	Feet				
1	295	225	20				
2	220	250	22				
3							
4							
5	· · · · ·		1	e german a vertimenen av det fragen.			

ection 3				RECOR	D OF CAS	ing ;		
Dia	Pounds	Threads	Depth		Feet	Type Shoe	Perforations	
in.	ft.	in	Top	Bottom	Leet	Type bloc	From	То
.)	}.€a¥v	6	U.	255	255	LULLINUT WILL	215	2-1
						open end	-	
							·	
				-				

Section 4

RECORD OF MUDDING AND CEMENTING

Depth From	in Feet	Diameter Hole in in.	Tons	No. Sacks of Cement	Methods Used
PTOIN					
		16	Gravel	packed	Eutore Of Willing and
				•	TH POTE MUTTE QLITTITE

Section 5	PLUGGING RECORD		
Name of Plugging Contractor	۰ ۰	License No	
Street and Number	City	State	
Tons of Clay used		Type of roughage	
Plugging method used		Datë Plugged	
Plugging approved by:	, Cerr	ent Plugs were placed as follow	vs:

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE GRIDINEER ONLY JULIAN USE OF STATE GRIDUNEER ONLY JULIAN USE OF STATE GRIDINEER ONLY JULIAN USE OF STATE GRIDUNEER ONLY JULIAN USE OF STATE GRIDUNE ONLY JULIAN USE OF STATE GRIDUNEER ONLY				
File No. 2-3980-A File No. 100 Use SRC)	I.a	ocation No.	17.32.1. 92213×
#-3 MALJAMAR 2-127-2	\sim			

Section 6			g of Well				
	in Feet	Thickness in Feet	Color	Type of Material Encountered			
From	То	· · · · ·					
J	Î	ــــــــــــــــــــــــــــــــــــــ	_£103-4	tüz Baa			
1	20	<u> </u>	. Lite	CITCHIG LOOK			
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E	22%	2.)	1. Pay	waver same			
Ż.	ēci /	5	rea	S1616			
128	250	22	brown	พยายา มีแ.ด			
250	2:2	ر بر مر المر مر مر المر المر المر المر المر	FLOW?	.)1.61.1.C			
			,	Top 61 rea bea			
				424221			
				ISFley			
	· · · · · · · · · · · · · · · · · · ·			L S Elev			
····				Elev of KIrc			
<u></u>				·			
				SP 17.32.1.42213			
				Loc. No.			
				Hydro. SurveyField Check			
			· · · · ·				
				SOURCE OF ALTITUDE GIVEN			
				interpolated_from_Topo,_Sheet			
· · · ·				Determined by Inst. Leveling			
				Other			
	·						

1999 . . .

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

6.0. aldredge Well Driller

1-3980-X

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17. 32.1.420

Form WR-23



STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1					Wel	iomer Sonroce	uring Agreemen	nt #B
1		1	(A) Owne	er of well.	A145.2.	scoutes in pa Dus	rum addig dama rewinitial	• · · · · · · · · · · · · · · · · · · ·
			City	- ····		• 466	State	•••••••••••••••••••••••••••••••••••••••
							20and	
			<u></u>	<u> </u>	<u>SE</u> 1/4	of Section2	3 Twp. 17	Rge32
							ngton Licens	
ł		ļ	Street and	Number_				
 			— City			Loco Mills	State Ne	w Mexico
			Drilling w	vas comme	enced			19
L	<u> </u>		Drilling w	as comple	ted		June 2,	
(E	Plat of 640	acres)						
Elevatio	n at top o	f casing in	l feet above sea	a level		Total dep	oth of well 20	<u>0</u>
State wł	ether we	ll is shallo	w or artesian	shall	ow	Depth to wa	ter upon completi	ion
Section 2	2		PRIN	CIPAL WA	TER-BEAR	ING STRATA		
		n Feet	PRIN Thickness in	icipal WA			-Bearing Formation	
Section 2 No.	Depth i From	n Feet To		ICIPAL WA			-Bearing Formation	
	Depth i		Thickness in		De	scription of Water	-Bearing Formation	
No.	Depth i From	To	Thickness in Feet		De	scription of Water		
No	Depth i From	To	Thickness in Feet		De nd litt	scription of Water		
No.	Depth i From	To	Thickness in Feet		De nd litt	scription of Water		
No	Depth i From	To	Thickness in Feet		De nd litt	scription of Water		
No 1 2 3 4 5	Depth i From 139	To	Thickness in Feet	Sand a	De nd litt	scription of Water		
No. 1 2 3 4 5 Section 3	Depth i From 139 8	To 195	Thickness in Feet 60	Sand a	De nd litt: D OF CA	scription of Water		
No 1 2 3 4 5	Depth i From 139	To	Thickness in Feet 60	Sand a	De nd litt:	scription of Water		
No. 1 1 2 3 4 5 5 Dia Dia	Depth i From 139	To 195	Thickness in Feet 60 ds Dep	Sand a RECOR	De nd litt: D OF CA	scription of Water	Perfor	ations

Section 4

L-4020

File No.

RECORD OF MUDDING AND CEMENTING

	in Feet	Diameter	Tons	No. Sacks of Cement	Methods Used
From	To	Hole in in.	Clay	Centerro	
]		-		······································
	i .	1 1		[

Section 5	PLUGGING	RECO	RD	• ••	• • • • •
Name of Plugging Contractor.				<u>r</u>	icense No.
Street and Number	Cit	City			tate:
Tons of Clay used					roughage
Plugging method used			Dat	e Plugged	19
Plugging approved by:		Cement Plugs were placed as follows:			
	Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE I	NGINEER ONLY				
Date Received					

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Location No. 17.32.2.43343

Depth	in Feet	Thickness				
From	To	in Feet	Color	Type of Material Encountered		
0	20		brown	Top soil		
20	45		-	Caliche		
45	100		rød	Sandrock		
100	135			Sand and little gravel (water section)		
195	200	· · · · · ·	red	Shale		
•				Driller estimated that well was good for		
				100 gallons of water per minute.		
				This well is located in State Section :		
				T. 17 S., R. 32 E., N.M.P.M., Les Count		
			•••••••••••••••••••••••••••••••••••••••	New Mexico.		
				4195		
				L S Elev 4/73- Depth to K Irc. / 35-		
	ļ			Elev of KTre#060-		
	l					
				17.32-2-43-43		
				Loc. No.		
				Hydro, SurveyField Check		
				SOURCE OF ALTITUDE GIVEN		
				Interpolaied from Topo. Sheet X		
				Determined by Inst. Leveling		
				Other		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

George Pennington Well Driller

L-4020

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17.32.2.433

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Form WR-23 FIELD ENGR. LOG

STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section	
Secu	л т

	(A) Owner of well Maljamar Repressuring Agreement #5
	Street and Number
	City State
	Well was drilled under Permit No. L-4019 and is located in the SE 14 SE 14 of Section 2 Twp. 17 Rge. 32
	(B) Drilling Contractor Ed. Burke License No.
	Street and Number City Hobbs, State New Mexico
	Drilling was commenced
	Drilling was completed May 6, 19 48
(Plat of 640 acres)	

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth From	in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	126	180		Red water sand
2				·
3				
4				
5	1			

Dia Pounds	Pounds	Threads	Depth			Marrie Chen	Perforations	
in.	ft.	in	Top	Bottom	Feet	Type Shoe -	From	To
7	·	[0	182	182		113	182
						· .		
				-				

Section 4

RECORD OF MUDDING AND CEMENTING

	in Feet	Diameter	Tons	No. Sacks of Cement	Methods Used		
From	To	Hole in in.	Clay	Cement			
0	182	10		÷1.5			
	1						
			· · · · · · · · · · · · · · · · · · ·	ist e .			
	-] 						

Section 5	PLUGGING	RECO	RD		
Name of Plugging Contractor.	······································		Lie	cense No	
Street and Number	Cit	у	Sta	te	
Tons of Clay used	Tons of Roughage used		Type of ro	ughage	
Plugging method used		:·	Date Plugged		19
Plugging approved by:			Cement Plugs were	placed as follows:	
· · · · · ·	<u></u>	No.	Depth of Plug	No. of Sacks Used	

Basin Supervisor	-	From	То	
				· ·
FOR USE OF STATE ENGINEER ONLY				
	1000			
				
Date Received				
	.6			
	ALIGHTER			
File No. L-4019 Use S.	<u>R.Q.O.</u>	L	ocation No.	17.32.2.434 34
				and the second

	· · · ·	1		OF WELL		
		Thickness in Feet	Color	Type of Material Encountered		
0	20		brown	Top Soil		
20	38		brown	Loose sand		
38	70		grey	Firm sand		
70	82		brown	Loose sand		
82	98		red .	Sandrock		
98	126		brown	Sand and gravel		
126	180		red	Water said		
180	162		red	Shale		
	-					
			-			
				This well is located in State Section 2		
				T-17 S., R. 32 E., N.M.P.M., Les County		
				New Mexico.		
				L S Elev 4/95		
				Elev of K Trc / 80+		
-				Loc. No. 17. 32. 2. 4 34341		
	<u> </u>	1		Hydro. SurveyField Check		
·	1	1				
		++				
				SOURCE OF ALTITUDE GIVEN		
		1		interpolated from Topo, Sheet		
	· · ·	<u> </u>		Determined by Inst. Leveling		
••••• · · · · · ·		┨────┤				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Ed. Burke

Well Driller

L-4019

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17.32.2.434

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Form WR-23



STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

ctior	

lection 1		(A) Owner of well Maljamar Co-op	Repressuring Agree	nent #7
		Street and Number		
		City Well was drilled under Permit No SW 14 BE 14 BE 14 of Section	L=4021 and is	located in the
	2	(B) Drilling Contractor George Penni Street and Number	Ington License	No
		City	State	·····
	•	Drilling was commenced Drilling was completed		19
(Plat of 640 acres)				

190 £t. _____Total depth of well___ Elevation at top of casing in feet above sea level.... shallow _Depth to water upon completion_____ State whether well is shallow or artesian.

PRINCIPAL WATER-BEARING STRATA

No.	Depth	in Feet	Thickness in	Description of Water-Bearing Formation
140.	From	То	Feet	· · · · · · · · · · · · · · · · · · ·
1	160	185	25	Sand and little gravel.
2				
3				
4	-			· · · · · · · · · · · · · · · · · · ·
5				

Section 3				RECOR	D OF CAS		<i></i>		
Dia Pound		Threads	Depth		Feet	Type Shoe	Perforations		
in.	ft.	in	Top	Bottom	reet	Type Shoe	From	To	
7			0	197	197		153	197	
10 3/4			0	155	155	Pulled as	well was gra	el packed.	

File No

RECORD OF MUDDING AND CEMENTING

· · * . . * · **

Section 4			RECORD	OF MUDDING A	AND CEMENTING	1	
Depth From	in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement		Methods Used	
	<u></u>	1					
	<u>.</u>			-			
					-		
					· · · · · · · · · · · · · · · · · · ·		-
	·					1 N	•

Section 5	PLUGGING RECC	RD	
Name of Plugging Contractor		License No	
Street and Number			
Tons of Clay usedTons of H			
Plugging method used			
Plugging approved by:		Cement Plugs were placed as follo	

		No.	Depth of Plug		No. of Sacks Used
Ba	sin Supervisor	110.	From	То	The of Datas Osca
FOR USE OF STATE ENGIN	IEER ONLY				
TON CON DI GIAIN DEGAN			4. K		
Date Received		-			
					-
	Second	unterit			
File No. L~4021	Uses. R. O.	0.	Lo	eation No.	17.32.2.44333

				OF WELL
	in Feet	Thickness	Color	Type of Material Encountered
From	To	in Feet		
0	20		brown	Top soil
20	50			Calicho
50	120		Brown	Loose sand
120	160		red	Sand rock
160	185		•	Sand and little gravel (water section)
185	190		red	Shalo
				Eight yards of pea gravel was placed bet
				10-3/4" pipe and 7" pipe; 10-3/4" pipe r
				to 155' and pulled as well was graveled.
				Driller estimated that well was good for
				100 gallons of water per minute.
				This well is located in State Section #2
				T-175, R-32E, NMPM, Lea County, New Mexi
				10" hole was drilled by George Penningto
		·		of Loco Hills, New Mexico. Completed
				June 14, 1950.
				LSElev 4/20.31
				Depth to KTrc_/837
		++	·····	Elev of KTrc.4018/
			· · · ·	F- 17.32.2.44333
				Loc. No
				Hydro. SurveyField CheckX
				SOURCE OF ALTITUDE GIVEN
				Interpolated from Topo. Sheet 🚬 🗙
				Determined by Inst. Leveling
				Other

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

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George Pennington Well Driller

17.32.2.443

L-4021





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A) 0	t Mor		Dia			AL INFORMATI					
Street o	r Post Office A	ddress	<u> </u>	<u>. O. B</u>	<u>ox 49</u>	88264-000		· Owner's W	ell No		
				-	•						
Vell was drille	ed under Permi	t NoL	402	21 <u>-</u> S		and is loca	ted in the:			•	
<u>i</u>	n Lea Coi	unty.				3 Township			32E	N.M.P.H	
•									· · · · · · · · · · · · · · · · · · ·		
c, Lot) Subd	10 ivision, recorde	of Block N d ín	0,		•••••••••••••••••••••••••••••••••••••••	f the County,	·				
					fee	t, N.M. Coordina	te System				
	<u> </u>					······				Grant,	
B) Drilling	Contractor	<u>Alan E</u>	ades	5			License	No. WD1	044		
\ddress1	200 E. B	<u>ender B</u>	lvđ.	., Hol	bbs, NM	1 88240					
Orüling Began	1-21-0	<u>2</u> co	mplet	ed <u>1-</u>	21-02	Type tools	rotary	S	ize of hole	9 7/8 _{in}	
levation of la	nd surface or			·····	at	well is	ft, Total	depth of we	<u>11 260</u>	ft,	
ompleted we	ILis (XX)	hallow 🗖	geter	tian		Depth to wa	tar 11000 00-	nistion of			
ompieten #¢		-						pietion of we	541	ft,	
Death	in Fact	1		1 2. PRIN	ICIPAL WA	TER-BEARING	STRATA	· · · · · · · · · · · · · · · · · · ·	· · ·.		
From	in Feet To	Thickne in Fee			Description	of Water-Bearing	Formation	6	Estimated Y gallons per π		
185	257	72	• •	Sand	& SAnd	Sand & SAndy Brown Clay					
100											
				Stri	ngers					·····	
				Stri	ngers						
				Stri	ngers						
							<u> </u>				
	Parede			Sectio	n 3. RECOI	RD OF CASING	<u> </u>				
Diameter (inches)	Pounds per foot	Threads per in.		Sectio		RD OF CASING	······································	of Shoe	Perfor	ations To	
Diameter		per in	1	Sectio Depth	n 3. RECOI in Feet	RD OF CASING	Туре		From	To	
Diameter (inches)	per foot	per in		Sectio Depth Top	n 3. RECOI in Feet Bottom	RD OF CASING Length (feet) 260	Туре		From	To	
Diameter (inches)	per foot	per in		Sectio Depth Top	n 3. RECOI in Feet Bottom	RD OF CASING Length (feet) 260	Туре	i	From	To	
Diameter (inches)	per foot	per in.		Sectio Depth Fop	n 3. RECOI in Feet Bottom	RD OF CASING Length (feet) 260	Туре	i	From	To	
Diameter (inches) 6	perfoot	per in		Sectio Depth Top	n 3. RECOI in Feet Bottom	RD OF CASING Length (feet) 260 DDING AND CE	Туре	i	From	To	
Diameter (inches)	perfoot	per in.	tion 4	Sectio Depth Fop	n 3. RECOI in Feet Bottom RD OF MUI	RD OF CASING Length (feet) 260	Type	i	From 180	<u>T</u> ∘ 260	
Diameter (inches) 6 Depth	per foot 160psi in Feet	per in. Sec Hole	tion 4	Sectio Depth Fop	n 3. RECOI in Feet Bottom RD OF MUI	RD OF CASING Length (feet) 260 DDING AND CE Cubic Feet	Type		From . 180	<u>T</u> ∘ 260	
Diameter (inches) 6 Depth	per foot 160psi in Feet	per in. Sec Hole	tion 4	Sectio Depth Fop	n 3. RECOI in Feet Bottom RD OF MUI	RD OF CASING Length (feet) 260 DDING AND CE Cubic Feet	Type		From 180	<u>T</u> ∘ 260	
Diameter (inches) 6 Depth	per foot 160psi in Feet	per in. Sec Hole	tion 4	Sectio Depth Fop	n 3. RECOI in Feet Bottom RD OF MUI	RD OF CASING Length (feet) 260 DDING AND CE Cubic Feet	Type		From . 180	<u>T</u> ∘ 260	

Address _____ Plugging Method _ Depth in Feet Cubic Feet of Cement No. Bottom Top Date Well Plugged. 1 Plugging approved by: (\cdot,\cdot) 2 S 3 State Engineer Representative 4 #215199

FOR USE OF STATE ENGINEER ONLY

Date Received	02/05/02	FOR USE OF STATE ENGINEER ONLY	~ 2101-11
	,00,02	`	FWL FSL
File No	2-4021-5	Use Sugal Locati	on No. 17, 32, 3442
	- ,		- 23422

				(and the second s
÷			section 6. LOG OF HOLE	
De From	pth in Feet To	Thickness in Feet	Color and Type of Material	
F10m				
0	1	1	Top Soil	
*				
1	26	25	Caliche	
26	90	64	Sand	
90	132	43	Sandy Brown Clay & Sandstone Stringers	
90	1	42		
132	185	53	Sand & Sandstone Stringers	
185	259			
	257	725	Sand & SAndy Brown Clay Stringers	
257	260	3	Red Clay	
		1		
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Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned here by certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

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Pades θ Driller Root

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

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Section 1. GENERAL INFORMATION

(A)	Owner of well Street or Post Office A				Owner	's Well No.	
	Street or Post Office A City and State	ddress					
Well v	vas drilled under Permi	t No		and is locat	ed in the:		
	a ¼	¼ <u> </u> ¼ <u> </u>	4 of Section	Township	Ran	ge	N.M.P.M.
	b. Tract No	of Map No	7.40 <u>°,</u>	of the			
	c. Lot No	_ of Block No ed in		of the County.			
	d. X=	feet, Y=		feet, N.M. Coordina	te System	<u>,,</u>	Grant.
(B)	Drilling Contractor				License No		
Addra	ess			·		<u> </u>	
	ng Began						
Eleva	tion of land surface or	·····		at well is	ft. Total depth	of well.	ft.
Comp	oleted well is	shallow 🗋 art	esian.	Depth to wa	ter upon completion	of well	ft.
		Section	on 2. PRINCIPAL	WATER-BEARING	STRATA		
[·····	Denth in Feet	Thickness				Estimated	rield

Depth in Feet Thickness		Description of Water-Bearing Formation	Estimated Yield		
To	in Feet		(gallons per minute)		
		·····			
		in Feet	in East Description of water-Bearing Formation		

Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfor	ations
(inches)	per foot	per in	Тор	Bottom	(feet)	Type of Shoe	From	To
					ļ			
						······································	+	
					.			<u> </u>

Section 4. RECORD OF MUDDING AND CEMENTING

				·	
Depth i From	n Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
LION .	10	Diamotor			
1					1 ;
			·		
		1			
1		1			
1					
1		1	,		

Section 5. PLUGGING RECORD

Plugging Contractor					
Address	······································	No.	Depth	in Feet	Cubic Feet
Plugging Method		NO.	Төр	Bottom	of Cement
Date Well Plugged		1			
Plugging approved by:		2			
	-	3		Ť	
SI	tate Engineer Representative	4			
·					

FOR USE OF STATE ENGINEER ONLY

Date Received	Typed	5/11/78					
		di se s		Quad	FW	/L F:	SL
			IIa	011	Location No.	17.32.3.4323	334
File No			Us	÷	Location No.		

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Depth in Feet Thickne		Thickness				
From	То	in Feet	Color and Type of Material Encountered			
0	40		Caliche			
40	116	-	Anhydrite and sand			
116	150		Sand			
150	363		Red bed			
363	695		Red bed and shells			
695	990		Red shale with shells			
			· · · · · · · · · · · · · · · · · · ·			
			i			
		·····				
		tronge Parlamente				
	<u> </u>	·=				
			· · · · · · · · · · · · · · · · · · ·			
1						

This well record is an excerpt from Oil Conservation Commission files at Hobbs, N.M.

Location: 17.32.3.4323334 Owner: Chevron U.S.A. Inc. Maljamar (Grayburg) Unit #12 Record of Casing: 8 5/8" - 1344' Elevation: 4284' GL

Driller

~-.

Rotary

660' FSL - 1905' FEL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole,

drilled, repaired or deeper

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district office of the State Engineer. If the provide the second state of the state Engineer is the second of the state Engineer is used as a physical second only Section 1(a) and Section are the completed nen this form is used as a plugging record, only Section 1(a) and Section keed be completed.

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			Section 1	GENERAL I	FORMATION			
() Owner of	well					Owner's	Well No	<u> </u>
Street or I	ost Office Ad	dress			· · · · · · · · · · · · · · · · · · ·			
City and S	itate		•		÷	,	<u></u>	
ell was drilled	under Permit	No			and is located	in the:		
a	. ¼	¼	¼ of Se	ction	Township	Range	· ·	N.M.P.M
b. Tract N	ło	of Map No		of the				
c. Lot No Subdivi	ision_recorded	of Block No 1 in		of the	ounty.			
					M. Coordinate 8	System		Zone ir
the				· · · · ·				Grant
B) Drilling Co	ontractor			<u></u>		_ License No		
rilling Began		Comp	leted		_ Type tools		Size of hol	e in
levation of lan	d surface or _			at we	1 is	_ ft. Total depth of	well.	ft
ompleted well	is 🗆 sl	hallow 🗆 at				upon completion of	[well	IC
		1	ion 2. PRIN	CIPAL WATE	R-BEARING ST		Eatimat	ed Yield
Depth j		Thickness in Feet		Description of	Water-Bearing F	ormation		er minute)
From	То	in reet						
· · ·	· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·	· ·	
				-				
		······						
]				I	·····	
			Sectio	n 3. RECORD	OF CASING			
Diameter	Pounds	Threads		in Feet	Length	Tune of Chap	Pe	iforations
(inches)	per foot	per in,	Тор	Bottom	(feet)	Type of Shoe	From	1 <u>To</u>
		1						
					ļ	<u></u>		<u></u>
							ļ	ļ
		<u></u>		<u>}</u>	· · · · · · · · · · · · · · · · · · ·			
·	<u>.</u>	l		<u></u>	J	L		<u> </u>
		Sectio	on 4. RECO	RD OF MUDD	ING AND CEM	ENTING		
Depth i	in Feet	Hole	Sac	ks C	ubic Feet	Method	of Placemen	ıt
From	То	Diameter	of M	lud o	f Cement	motica		
			}					
								<u> </u>
			1	<u></u> L				
			Conti	on 5, PLUGGI	IC RECORD		•	
					IG RECORD			
Plugging Contra	actor							
					No.	Depth in F		Cubic Feet. of Cement
						Top	Bottom	or cement
Date Well Plugg	-				<u> </u>			
plugging approv	ven by:				3			
		State Eng	incer Repre	sentative	4			

			FOR USE	E OF STATE E	NGINEER ONL	Y		
Date Received	Typed	5/11/78		-			,	201
				Quad	I	FWL	ł	
		· .		Use 0:	1	Location No. 1	7.32.3.44	300
File No.				USE V2		~~~~ <u>~</u>		

File No

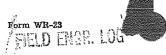
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Depth in Feet Thickness Color and Type of Material Encountered 0 115 Caliche 7 115 255 Red cock 7 230 1055 Red rock 7 290 1055 J285 J285 290 105 J285 J285 290 105 J285 J285 290 105 J285 J285 290 105 J285 J285 290 101 J295 J285 290 101 J295 J285 290 101 J295 J295 290 101	Nanth in	Reat	TL	Section 6. LO	G OF HOLE
115 255 280 Sand 290 1055 Red rock 290 1055 Red rock 1 1 1 1 <th></th> <th></th> <th></th> <th></th> <th>Color and Type of Material Encountered</th>					Color and Type of Material Encountered
115 255 280 Sand 290 1055 Red rock 290 1055 Red rock 1 1 1 1 <th>n </th> <th>115</th> <th></th> <th>Cald-t-</th> <th>2</th>	n	115		Cald-t-	2
255 290 Sand 290 1055 Red rock 1 1 1<				**************************************	۲ <u>ــــــــــــــــــــــــــــــــــــ</u>
290 1055 Rsd rock I S Elev 1285 1285 Depth to K 222 Trc 1285 Bell of K 223 Trc 1285 Bell of K 223 Trc 1285 Bell of K 233 1285 Bell of K 233 1285 Bell of Casing: 8 5/8" 1285 Bell of Casing: 8 5/8" 1285 Bell of Casing: 8 5/8" 1285 Bell of K 236 1275 Rotary 1285	115	255		Red rock	
L S Elev 4125 4425 Depth to K 2125 Tre 4122 = Elev of K 2125 Tre 4122 = Elevation 12 Elevation = Section 7. REMARKS AND ADDITIONAL INFORMATION This well record is an excerpt from 0il Conservation Combinsion files at Hobbs, N.M. Location: 17.22.3.44300 Elevation: 4285' DF Maljamar (Grayburg) Unit #14 Record of Casing: B 5/8" - 1275' Rotary 330' FSL - 990' FEL = = undersigned hereby certifies that, to the best of his knowledge and belief, the forgoing is a true and correct secord of the ab crited hole.	255	290		Sand	
Depth to K_272_(rc72; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elevation: Elevation: Section 7. REMARKS AND ADDITIONAL INFORMATION This well record is an excerpt from Oil Conservation Compliation files at Hobbs, N.M. Location: 17.32.3.44300 Dener: Elevation: 4285' DF Maljamar (Grayburg) Unit #14 Record of Casing: 8 5/8'' - 1275' Rotary 30' FSL - 990' FEL	290	1055		Red rock	I
Depth to K_222_(rc2					·
Depth to K_222_(rc2					
Depth to K_222_(rc2					
Depth to K_222_(rc2		/			
Depth to K_272_(rc72; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elev of K_3725_rc.472_0; Elevation: Elevation: Section 7. REMARKS AND ADDITIONAL INFORMATION This well record is an excerpt from Oil Conservation Compliation files at Hobbs, N.M. Location: 17.32.3.44300 Dener: Elevation: 4285' DF Maljamar (Grayburg) Unit #14 Record of Casing: 8 5/8" - 1275' Rotary 30' FSL - 990' FEL					Com 41285-
Section 7. REMARKS AND ADDITIONAL INFORMATION Section 7. REMARKS AND ADDITIONAL INFORMATION This well record is an excerpt from Oil Conservation Combission files at Hobbs, N.M. Location: 17,22.3.44300 Maljamar (Grayburg) Unit #14 Record of Casing: 8 5/8" - 1275' Rotary 330' FSL - 990' FEL e andersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the ab arrhed hole.				LSElev Zd	10. Trc //5
Section 7. REMARKS AND ADDITIONAL INFORMATION This well record is an excerpt from Oil Conservation Commission files at Hobbs, N.M. Location: 17.32.3.44300 Elevation: 4285' DF Owner: Chevron Oil Co. Maljamar (Grayburg) Unit #14 Record of Casing: 8 5/8" - 1275' Rotary 330' FSL - 990' FEL e undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the abd scribed hole.				Elev of K-39	<u>15 Trc 4/ 20 7</u>
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Maljamar (Grayburg) Unit #14 Record of Casing: 8 5/8" - 1275' Rotary 330' FSL - 990' FEL e undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the ab- cribed hole.	Location: Owner: Cl	17.32.3 Nevron Oi	.44300 1 Co.		Elevation: 4285' DF
Rotary 330' FSL - 990' FEL e undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the abs cribed hole.		Maljama	r (Graybur	g) Unit #14	
330' FSL - 990' FEL		Caprily.	0.210	- 1275	
e undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the abareribed hole.	Rotary				
scribed hole.	330' FSL -	- 990' FE	L		
cribed hole.	V				· · · · ·
scribed hole.	,				
cribed hole.	e undersigned l	hereby certif	ies that, to the	best of his knowledge	and belief, the foregoing is a true and correct record of the abo
	scribed hole.				
					•

of the State Engineer. A pions, except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deepend when this form is used as a plugging record, only Section 1(a) and Section freed be completed.



STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1	(A) Owner of well	
	Street and Number	ateew mex1co
	Well was drilled under Permit No. 101 St. 2-1-59 <u>E 14</u> 110 June (B) Drilling Contractor 0.0. ALCrease Street and Number 100 Jij	and is located in the
<u> </u>	City July 145, 504 St	25 <u>19</u> 51
	Drilling was completed	

(Plat of 640 acres)

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth i From	in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	132	196	24	Rea
2				
3				
4	-			
5				

Section 3				RECOR	O OF CAS	NG			
Dia	Dia Pounds Threads		Depth				Perforations		
in.	ft.	in in	Top	Bottom	Feet	Type Shoe	From	То	
5 5/	8 3120	ea	0	150	150	.16 (10	136	T,0	
							·		
		\							

Section	4	

RECORD OF MUDDING AND CEMENTING

Depth in Feet				No. Sacks of Cement	Methods Used		
	10	7			5 SHOKE OF CLIFFIES WHE PARTED		
-					i. top of note mule oriting		
	<u>.</u>				well to acep hole IYom Caving		

Section	5

PLUGGING RECORD

Name of Plugging Contractor	 License No.	
Street and Number		
Tons of Clay used		
Plugging method used		
Plugging approved by:	Cement Plugs were placed as follows:	

	No.	Depth of Plug		No. of Sacks Used
Basin Supervisor		From	To	
FOR USE OF STATE ENCLYEER, SHERY				
DISLUST ET TO TO NOT	[
Date Received				
41 :8 WU 81 NUC 2961				
File No. Misc. 2.6-59 Use D	em	L	ocation No	17.32.10.122

Section	6
occuon	ю

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LOG OF WELL

Depth in From	n Feet To	Thickness in Feet	Color	Type of Material Encountered		
	<u> </u>	5				
			DI OWS	Top Suil		
1. 	42	7	65.1.M. :	Calicule mok		
42	132	12.	Leona	Serug Clay		
198	450	24	Kea	hat or Sum		
	·······		· · · · · · · · · · · · · · · · · · ·			
			·			
-		4				
			· · · · · · · · · · · · · · · · · · ·			
				· · · · · · · · · · · · · · · · · · ·		
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		·		· · · · · · · · · · · · · · · · · · ·		
······································						
	· · ·					
			t			
	I.	1				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

C.O. aldredge Well Driller

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			•	STATE EN WEL	GINEER L RECO		•	י איש י		Ro 1	ised jues 1973
Streat c	of well <u>C</u> or Post Officer d State <u>C</u>	ddress	Pillip P.O. 1	ion I. GEN 50X 5 772	eral NI 1 <u>194</u> 52	ORMA	NOI)wner's Wel	II NO. E	<u>ul-1</u>
ŧ		X			21		ilp	1 <u>17 5.</u>		<u>32E</u> Kama	 <u>«ЕчР]</u>
e, Lot i Subd	t No, to, ivizion, record	. of Block N ed (n	10, <u>1. F. F</u>	- 3	_ of the Cou	inty,			- <u>///n</u> - (
ths(B) Drilling	Contractor	SCARE	ADEDUG	H DLU	LING,	T.ŇC		License N	. [1]D	1188 806- 8	Zone in Grant.
Drilling Began	<u>5-14-6</u> nd surface or .	1007 c	ompleted E 10112N	5-15-2	2 <u>607</u> .7 . at well !s	yps too	Ai	<u>r. Total d</u>	<u>ey</u> si	ze of hole. 12	<u>in</u> . 5(r.
Dep tai	II Feef	Thickn in Fee	ess	RINCIPAL		EARING	S STR/	TA		Estimated allons per	Yield
	9 III II							······································		999 - 201	
<u>A</u>	. 607				·.				l		
Diamatan	Pounds		T THE R. P. LEWIS CO., LANSING MICH.	ction 3, REC	ORD OF		3		T	Parfo	rations
Diameter (inches)	per foot	Threads per in,	Тор	Bott	om	Length Ty (feet) Ty		Type of Shos		From	To
6	<u>5ch 40</u>	PVC	72	95				.020		95	125
							·		11777-1111-1070-11177-11177		• •
[]	- -	-									
. Depth i	n Fest To	Sec Hole Diameter	5	CORD OF M acks 'Mud	Cubic		IMENT		thod of Pie	icement	
/7	80	x 3/4					<u>Na</u>	1040			
20	120	8 3/4						annenn raanna Parisanna daar			
120	125	SAND SAND DOURED									
Plugging Contro	a fyr allan Clyny Brith American y conservation			tion 5. PLU	GGING R	ECORD	7			haard i na Godela Constant Bob	
Address Plugging Method	- <u></u>					No.	<u> </u>	Depth Top	in Fest Bottom		bic Feet Cement
Date Well Plugge	d										
Plugging approve	d by:	State En	gineer Repr	esentativo	, 						
£			• •	E OF STAT	FENGIN		ILY	a entre services			المعندة يبينينينيونيون 11.11.11.11.11.11

FOR	USE	OF	STATE	ENC

0	FV

FDA NO. NO FIL Kuber 059 Use

Date Received

monitor well Location No. FSL

S

17.32.2

		-	
<u>¢</u>			Section 6. LOG OF HOLE
Prom Depti	h in Feet 🔪 To	Thickness in Feet	Color and Type of Material Encountered
	15	5	Smus: yellowst ero, ifg, dey, domp, loose.
5	20	15	SILLASAND: REDOKT DEDWO - REDDISH Jellow, loose,
20	25	5	SANDTONE: Loosely CONSOLIDATED, VERY DATE DEDIN
25	60	35	SAND MINORLY CONSOLIDATED H. PEODISH DROWN),
			Soft, dey, silty, vf-five, NON plastic
60	80	201	SAND LOOSely COUSOLIDATED, VERY DATE DERWU
			VF-FINE, SILTY, NON PLASTIC, del
_80	90	10	SANDSTONE W/ShALE INTERBEDS! It yellowish
· 0-			brown loosely consoliontion, Vf-f dey.
<u></u>	110		SAND INTERBEDGED IN ShALE SAND-
-			yellowish bedww, loose, slightly damp,
110			SILTY. ShALE; PROWN, NERY FINE
_110	120	10	SAND INFEE bedded Le)/ShA/E: SAND-
			deno nou olache city shally
An a da anna 2000 an an anna 2000 an an an an	···		anthip NAN DATE STILLE SHARE
120	125		SALL IL HOLD WICH MANNED DAMAG
	100		SAND, It. VELIDWISH BEAWD, AAMD,
			sugning puising, roose, or time, surger,
	× .		g -
territoria and a second second second		•	
		Section 7.	REMARKS AND ADDITIONAL INFORMATION

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole. ·.

<u>Dedulance</u> Driller ھى

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office

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Form FIELD ENGR. LO.

STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1	49	(A) Owner of well Forece, Inc.	
	frust S. 1 Freim Sas	Street and Number 1907 3109 City	and, State Toras -5220 and is located in the - 36 Twp 170 Rge 148 - 2609
#5 pp Cap	-2-147-6	City 500 Drilling was completed 73286	bbg. State <u>Per 'arico</u> n. <u>11</u> , <u>1965</u>
(Plat of 640 a	cres)	3788	

Elevation at top of casing in feet above sea level <u>Sintern</u> Total depth of well 231. State whether well is shallow or artesian <u>Reallow</u> Depth to water upon completion 30

Depth in Feet		Thickness in	Description of Water-Bearing Formation			
No.	From	To	Feet			
1	105	155	50	Sand, consolidated, course		
2	179	195	20	Bana		
3	220	228		Cand & grsvel		
4						
5	<u> </u>		[

Section 3		•		RECOR	D OF CA	SING			
Dia Pounds		Threads	pends Depth				Perforations		
in.	ft.	in	Top	Bottom	Feet	Feet Type Shoe	From	То	
15 311	32.75		27	231	232	lone	103-231		
<u> </u>				1			and the second		
				-					
		<u>`</u>	1						

Section 4

RECORD OF MUDDING AND CEMENTING

OCCATOR A				<u>.</u>	
Depth	Depth in Feet Diameter Tons No. Sacks of Hole in in Clay Cement		Methods Used		
From	To	Hole in in.	Clay	Cement	·
	J				

Section 5

Plugging approved by:

PLUGGING RECORD

Name of Plugging Contractor		License	No
Street and Number	City	State	·
	Tons of Roughage used		
	Date		
rabband month month			

Cement Plugs were placed as follows:

(in A Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY JULIU JULIU Date Received 72:8 WU TZ NUR \$961				
File No. 1-52-88 Use Co	<u></u>	La	eation No.	<u>17.34</u> .36.44 3 134°

Section 6

2

LOG OF WELL

Depth in Feet From To		Thickness		Type of Material Encountered	
From	To	in Feet		Type of Material Encountered	
00	2	2	<u>31905</u>	coll & rock	
2	26.	26	while to	Calicha & rock	
26	. 60	52	Grey	Sandy shale	
<i>E</i> 0	- 85	5	¢.4	Send rook	
85	140	55	祥	Sand	
140	1.55	15	₹¢	Sana rock	
155	165	10	95	Sandy chale	
165	195	30		Band & sand rock	
195	550	25	¥₹	Sand rock	
220	228/		1 5	tand & gravel	
228	231	3	Red	Red bed, shale	
· · · · ·					
	-			L S Elev 3988	
				Depth to K	
			-		
				Loc. No. 17.34,36,4443134	
				Hydro- Survey Field Check	
-			-		
				SOURCE OF ALTITUDE GIVEN	
				Interpolated from Topo. Sheet	
			· · · · · · · · · · · · · · · · · · ·	Determined by Inst. Leveling	
				Other	
				A start the	
[····	

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

With Clewhile Wet Driller

17.34.36.443

1-5288

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1.2. 13.1151

Address Box 1493 Lovington NM 88260 Drilling Began 7/28/94 Completed 8/4/94 Type tools Gable Size of hole 9 minimizes in. Elsvation of land surface or				-		GENERA.			•		
Street or Ford Office Address 10 202 10 City and Status Mail Jamar PM Well was dified ander Pernit No RA 6855 and is located in the: a. SE w.NV. W.W. W.W. W. of Section 10 Township 17.5 Range R 32.5 N.M.P.M. b. Tract No	(A)	Owner of	well Ge	orge Ker	nemore				Owne	r's Well No	RA 8855
Well was drilled ander Permit No RA 8855and is located in the: a. SEW_NW_W_NW_W		Street or	Post Office Ad	dress <u>PC</u> Malja	mar NM	Þ		0			! !
a. SE y	Well -	•					and	is located	in the:		
b. Tract No											E _{N.M.P.M.}
b. Lot NoOf Block NoOf theCounty. d. Xefeet, Y=feet, N.M. Coordinate SystemCone in theGrant. determine the			-					-		-	
4. xe											
(B) Drilling Contractor J. & K. Drilling License No. WD. 1235 Address Box 1493 Lovington NM. 88260 Drilling Began 7/28/94 Completed 3/4/94 Type tools Gabla Size of hole 8# in. Elevation of land surface or		c. Lot No Subdiv	ision, recorded	i în	Lea			·.			
(B) Drilling Contractor J. & K. Drilling License No. WD. 1235 Address Box 1493 Lovington NM 88260 Drilling Began 7/28/94 Completed 8/4/94 Type tools Gabla Size of hole 8/2 in. Elevation of land surface or at well is ft. Total depth of well d.58 ft. Completed wells [2] shallow artesian. Depth to water upon completion of well 0 ft. Section 2. FRINCIPAL WATER BEARING STRATA Estimated Yield (galions per minute) (galions per minute) From To In Feet Description of Welter-Bearing Formation (galions per minute) Section 3. RECORD OF CASING Estimated Yield (galions per minute) (galions per minute) Incheck Portost Threads Depth in Feet Length Type of Show Perforations No< estig wates rab, in Well		d. X≠ the		_ fcet, Y=		feet	, N.M. Co	ordinate 5	ystem		Zone in Grant.
Address Box 1493 Lovington NM 88260 Drilling Began 7/28/94 Completed 3/4/94 Type tools Gable Size of hole 82 in. Elevation of land surface or	(B)	Drilling C	ontractor	J&K Dr	rilling				_ License No,	WD 1235	
Elevation of land surface or	Addr	ess	Box 149	3 Lovir	igton NM	1 8826	50				
Completed wells Data and and a result. Depth to water upon completion of well. Orthogen and a result. Depth in Peet Thickness Description of Water-Bearing Formation Estimated Yield (galons per minute) From To In Feet Description of Water-Bearing Formation Estimated Yield (galons per minute) Image: state	Drilli	ng Began .	7/28/94	Com	pleted <u>8/1</u>	1/94	Тур	e tools	Cable	Size of h	ole <u>8</u> ± in.
Completed wells Data and one of a reasin. Dot the vaser upon completion of well	Eleva	tion of lan	d surface or	-		at	well is		_ ft, Total depth	of well	<u>₫ 58</u> ft.
Section 2. PRINCIPAL WATER-BEARING STRATA Depth in Feet Thickness Description of Water-Bearing Formation Batimated Yield (galons per minute) Image: Prometry in Feet No water was found drilling											
Depth in Feet Thickness Description of Water-Bearing Formation Batimated Yield (galous per minute) From To No water was found drilling	Com	10100 1101									
From To In Feet No water was found drilling Image: state Engineer Representative No water was found drilling Image: state Engineer Representative Image: state Engineer Representative No water was found drilling Image: state Engineer Representative Image: state Engineer Representative No water was found drilling Image: state Engineer Representative		Depth i	in Feet	Thickness	s						
Image: Section 3. RECORD OF CASING Diameter (inches) Pounds per foot Threads Depth in Feet Length (feet) Type of Shoe Perforations No CSE WAS Top Bottom (feet) Type of Shoe From To No CSE WAS Top Bottom (feet) Type of Shoe From To No CSE WAS Top Bottom (feet) Type of Shoe From To Section 4. RECORD OF MUDDING AND CEMENTING C C C C C Depth in Feet Hole Sacks Cubic Feet Method of Placement C From To Diameter of Mud Cement C C Section 5. PLUGGING RECORD Section 5. PLUGGING RECORD No. Depth in Feet Cubic Feet Plugging Contractor Section 5. PLUGGING RECORD No. Depth in Feet Cubic Feet State Engineer Representative 1 Image: State Engineer Representative 3 Image: State Engineer Representative FOR USE OF STATE ENGINEER ONLY Date Weil 10, 1994	<u> </u>	From	To	HI Feet	<u></u>					(galona	per minuto)
Diameter Pounds Threads Depth in Feet Length Type of Shoe Perforations (inches) per foot Threads Depth in Feet Length Type of Shoe Ferforations No csg was rsa in well in in Section 4. RECORD OF MUDDING AND CEMENTING in in in in in Depth in Feet Hole Sacks Cubic Feet Method of Plasment* in Prom To Diameter of Cament in in in Section 5. PLUGGING RECORD in in in in in in Plugging Contractor				·							
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Diameter (inches) Pounds per foot Threads per foot Depth in Feet Length (feet) Type of Shoe Perforations No C5g WBS ran in well								<u></u>			
Diameter (inches) Pounds per foot Threads per foot Depth in Feet Length (feet) Type of Shoe Perforations No C5g WBS ran in well						<u></u>	<u> </u>				
Partner Per in. Top Bottom Type of Shoe From Top Image: Section 4. RECORD OF MUDDING AND CEMENTING Image: Section 4. RECORD OF Mudding and the section 4. RECORD OF Mudding and the section 4. RECORD OF Mudding and the section 4. RECORD of Cement Image: Section 4. RECORD OF Mudding and the section 4. Record and the section 4. R	,						RD OF C	ASING			<u> </u>
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Section 4. RECORD OF MUDDING AND CEMENTING Co Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of Mud of Cement Method of Placement Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Plugging Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Address Image: Contractor Image: Contractor Image: Contractor Image: Contractor Plugging Method Image: Contractor Image: Contractor Image: Contractor Image: Contractor State Engineer Representative Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor I			· · · · · · · · · · · · · · · · · · ·								
Depth in Feet Hole Sacks Cubic Feet Method of Placement From To Diameter of Mud of Cement Method of Placement Image: Section S. PLUGGING RECORD Plugging Contractor	.			Sect	ion 4 RECOR	D OF MU		ND CEM	RNTING	ŝ	
From 16 Diameter of random of centering 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10		^		Hole	Sack	s	Cubic F	eet		d of Placeme	1
Image: Section 5. PLUGGING RECORD Section 5. PLUGGING RECORD Section 5. PLUGGING RECORD Section 5. PLUGGING RECORD No. Depth in Feet Cubic Feet Of Cement Date Well Plugged Plugging approved by: State Engineer Representative FOR USE OF STATE ENGINEER ONLY Date Received August 10, 1994		From	10	Diameter			or cent			F->	1-1
Section 5. PLUGGING RECORD Plugging Contractor Address Plugging Method Date Well Plugged Y State Engineer Representative Y<											1 1
Section 5. PLUGGING RECORD Plugging Contractor Address Plugging Method Date Well Plugged Plugging approved by: State Engineer Representative FOR USE OF STATE ENGINEER ONLY Date Received August 10, 1994											
Section 5. PLUGGING RECORD Plugging Contractor	· · · · · · · · · · · · · · · · · · ·				<u> </u>		. <u></u>				
Address No. Depth in Feet Cubic Feet Plugging Method					Section	n 5. PLUG	GING RE	CORD		10	
No. Top Bottom of Cement Date Well Plugged 1 1 1 Plugging approved by: 2 3 3 State Engineer Representative 3 4 1 FOR USE OF STATE ENGINEER ONLY Date Received August 10, 1994 Quad FWL FSL		-	actor	· · · · · · · · · · · · · · · · · · ·	Mileonori	<u> </u>		r	Dauth in	Faat	Out Fut
Plugging approved by: State Engineer Representative 2 State Engineer Representative 3 FOR USE OF STATE ENGINEER ONLY Date Received August 10, 1994 Quad FWL			d					No.			
State Engineer Representative 4 FOR USE OF STATE ENGINEER ONLY Date Received August 10, 1994 Quad FWL FSL					<u> </u>						
Date Received August 10, 1994 Quad FWL FSL				State En	gineer Represe	ntative		And a second sec			
Date Received August 10, 1994 Quad FWL FSL					FOR USE	OF STATE	ENGIN	EER ONL	Y		
	Date	Received	August 10	, 1994		· 01	uad 🚣		FWL _		FSL
File No		lo Ne	RA-885	5				t ia	1		

Depth From	in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	18	18	Sand top soil light brown in calor
18	20	2	Caliche
20	38	18	red sand
38	40	2	med hard sandstone, red in color
40	50	10	white sand with red gravel
50	60	10	red sand with red and black flintstone gravel
60	80	20	Brown colored sand with red and white colored sandstone gravel.
80	135	55	Red shale with mixture of multi-colored grave.
135	157	22	Red colored shale with red, blue, and gray grave
157	158	1	Red bed
			· · · · · · · · · · · · · · · · · · ·
			- <u> </u>
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	1	-	
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	1		
		·	
		Section	7. REMARKS AND ADDITIONAL INFORMATION

encountered.while drilling this well. Owner wants to go on to 2 feet. Rigged down and moved off hole. Hole was left openmwith 12 foot 9 5/8 csg in top of well.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Carl Illion Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. A ions, except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired, or de hen this form is used as a plugging record, only Section 1(a) and Section d be completed.

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Form WR-23	
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STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

The second state of the se			_, (A) Owne	a of woll	Malja	ar Cooperati	vo Repressuring	Agreement
	1		Street and	Number	Room 2	10, Booker Bi	.dg.,	
							StateNe	
			Well was	drilled un	lder Perm	it No. L-2-1	51and is	s located in the
			NW 1/4	SW 1/4	NE 1/	of Section	11 Twp. 17	Rge. 32
			- (B) Drilli	ng Contra	actor	Burke	License	No
			Street and	Number		Hobbs,		
			City				State New	Mexico
			Drilling u		enced			
			 Drilling w	as comple	ted		eptember 10,	19.47,
	at of 640 ac							
Elevation	at top of o	casing in :	feet above sea	a leveL		Total dej	oth of well 140	~~.
State whe	ether well	is shallow	v or artesian_			Depth to wa	ter upon completio	n
Section 2			PRIN	CIPAL W/	ATER-BEAR	ING STRATA		
	Depth in	Feet	Thickness in		De	scription of Water	-Bearing Formation	
No.	From	То	Feet ·					
1								
2	1	[
3								
4	-					·····		
5								
<u> </u>	1			· · ·				
Section 3			<u>.</u>	RECOF	D OF CA	SING	· · · · · · · · · · · · · · · · · · ·	
Dia	Pounds	Thread		·	Feet	Type Shoe	Perforat	
in.	ít.	in	Top	Bottom			From	To
7			0	139	139			-
		<u> </u>				· · · · ·	34	
				1	<u> </u>	l	<u> · </u>	
	·	· ·	,		-7			
Section 4	<u>.,</u>	1	RECOR		DDING AN	ID CEMENTING		-
		Diamete			DDING AN	id cementing		
	in Feet	Diamete Hole in i	r Tons	No. S	·····	d cementing	Methods Used	
Depth	in Feet	1	r Tons	No. S	cks of	ID CEMENTING	Methods Used	
Depth	in Feet	1	r Tons	No. S	cks of	ID CEMENTING	Methods Used	
Depth	in Feet	1	r Tons	No. S	cks of	ID CEMENTING	Methods Used	
Depth	in Feet	1	r Tons	No. S	cks of	ID CEMENTING	Methods Used	
Depth	in Feet	1	r Tons	No, Sa Cen	neks of nent	· · · · · · · · · · · · · · · · · · ·	Methods Used	
Depth From	in Feet To I	Hole in i	er Tons in. Clay	PLUGO	acks of oent	ORD		
Depth From Section 5 Name of	in Feet To To Plugging	Hole in i	r Tons in. Clay	PLUGO	acks of nent	ORD	License No	
Depth From Section 5 Name of Street an	in Feet To Plugging	Hole in i	er Tons in. Clay	PLUG	acks of nent	ORD	License No State	
Depth From Section 5 Name of Street an Fons of C	In Feet	Hole in i	r Tons in. Clay	PLUGO	eks of nent	ORD Ty	License No State pe of roughage	
Depth From Section 5 Name of Street an Fons of C	In Feet	Hole in i	r Tons in. Clay	PLUGO	eks of nent	ORD Ty Date Plu	License No State pe of roughage 1gged	
Depth From Section 5 Name of Street an Fons of C Plugging	In Feet	Hole in i	r Tons in. Clay	PLUGO	eks of nent	ORD Ty Date Plu	License No State pe of roughage	
Depth From Section 5 Name of Street an Fons of C Plugging	In Feet	Hole in i	r Tons in. Clay	PLUGO	acks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	
Depth From Section 5 Name of Street an Tons of C Plugging	In Feet	Hole in i	r Tons in. Clay	PLUGO	eks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	
Depth From Section 5 Name of Street an Tons of C Plugging	in Feet To Plugging ad Number Clay used method us approved	Hole in i	Tons of R Basin Su	No. 54 Cen PLUGO PLUGO Coughage T	acks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	
Depth From Section 5 Name of Street an Tons of C Plugging	in Feet To Plugging ad Number Clay used method us approved	Hole in i	r Tons n. Clay	No. 54 Cen PLUGO PLUGO Coughage T	acks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	
From Section 5 Name of Street an Tons of C Plugging Plugging	Plugging d Number Clay used method us approved	Hole in i Contractor	Tons of R Basin Su	No. 52 Cen PLUGO Coughage T Dervisor	acks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	
Depth From Section 5 Name of Street an Tons of C Plugging Plugging	Plugging d Number Clay used method us approved	Hole in i Contractor	er Tons in. Clay Clay Pr	No. 52 Cen PLUGO Coughage T Dervisor	acks of nent	ORD Ty Date Plu Cement Plu Depth of F	License No. State pe of roughage ugged gs were placed as f	

S.R.O.

Use

- 11-11-27 - 11-13-1 - 2-132-1

File No. 12-1-51

23/432

___Location No. 17.32.11.23144

tion 6		<u>.</u>	LOG	OF WELL
Depth :	in Feet	Thickness	Color	
From	To.	in Feet	Color	Type of Material Encountered
0	5	-		Top soil
5	22		white '	Packed sand
22	48		Eray	Soft sand
48	93		red	Soft sand
93		· · · · · ·	*	Top of water sand
93	121			Coarce water sand
1317	-			Bottom of sand
131	140		red	Clay
140				Total depth.
		·		
·····				139' of 7" OD Lepwell pipe run, consisting
· · · · ·		·····		of the last two joints perforated, which
·····	-		41425	amounted to 43', Total water sand thickne
	L S Elev		Trc 137	38'. Hole was bailed in an effort to crea
	Depth_t Elev_of	<u> </u>	Trc. <u>4011</u>	a crevice and remove as much sand as possi
				···· ·······························
	7	.32.11.	23/44*	Well was gravel packed with 91 yards. It
				hoped that more gravel can be placed betwe
<u>Loc. N</u>		na an terna anterna da seconda seconda seconda da seconda da seconda da seconda da seconda da seconda da second	iliai a disang a si a s	casing and the outer wall after well has
Hydro.	Survey	Field Chec	<u> </u>	been pumped.
				It is estimated that the well is capable o
				producing 100 gallons per minute. This we
	SOURCE OF	מ ייתיודניד	11/1261	was completed on September 10, 1947. It w
Inte	rpolated from		IVEN	drilled by Burke, Phone No. 90, Hobbs, N.
	ermined by h			
Ot		<u>, , , , , , , , , , , , , , , , , , , </u>		······································
~~0				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Burke

Well Driller

17.32.11.231

1-2-2-51

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Section	L.	GENERAL	INFORMA	TION
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Street or	well Post Office Ad State	dress		· · · · · · · · · · · · · · · · · · ·	-	Owner	's Well No	
/ell was drilled	under Permit	No		ar	nd is located	in the:		
a	_ ¼ ¼	· ¼	¼ of Section_	,	Township	Ran	ge	N.M.P.M
b. Tract l	No	of Map No		of the				
c. Lot Ne	o	of Block No		_ of the				
d. X= the		_ feet, Y=	······································	feet, N.M.	Coordinate 8	ystem		Zone ir
B) Drilling C	ontractor					_ License No		
\ddress					-			
							Size of .	holein.
levation of lar	nd surface or _			at well is.	<u> </u>	_ it. Totai depth	of well	ft.
Completed well	is 🗆 s	hallow 🗖 art	esian.	Dej	pth to water	upon completion	of well	ft
		Secti	on 2. PRINCIPAL	. WATER B	EARING ST	RATA		
Dep th	in Feet	Thickness	Descrir	tion of Wal	er-Bearing F	ormation		nated Yield s per minute)
From .	To	in Fect		-101 51 113			(ganon	s per limate)
				<u></u>				
	· · · ·		· · · · · · · · · · · · · · · · · · ·					
	L	- -	Section 3. R	ECORD OF	CASING			
Diameter	Founds	Threads	Depth in Fee		Length	Type of Sho		Perforations
(inches)	per foot	per in.	Тор Вс	ottom	(feet)	Type of and	Fr	om To
				·····				
							<u>}</u>	
	-	Sectio	n 4. RECORD Of	MUDDING	G AND CEM	ENTING		
	in Feet To	Hole Diameter	Sacks of Mud		c Feet cment	Metho	od of Placen	nent
From	10							· · · · · · · · · · · · · · · · · · ·
	ļ							
	l ·		-					
			Section 5. P	LUGGING	RECORD			
Plugging Contr	actor							
Address					- No.	Depth in Top	Feet Bottom	Cubic Feet of Cement
Plugging Metho Date Well Plug	ged					1 Op	Bottom	
Plugging appro	+							
		State Engi	neer Representati	7e	$-\frac{3}{4}$			
<u></u>	· · · · · · · · · · · · · · · · · · ·		-		E	L		
D / D / -	Tunad	5/11/78	FOR USE OF S	FATE ENG	INEER ONL	Y		
Date Received	Tlhea	-11 - 2		Quad		FWL _		FSL
				011		Location No. 17	.32.26.4	1000
File No	-		Us	ee		Location No.		

. • .

Depth i		Thickness	Color and Type of Material Encountered
From	То	in Feet	
0	1.5		Caliche
15	80		Red clay
80	105		Red shale
105	210		Red bed
210	265		Blue shale
265	710		Red bed
710	850		Red sand (water 710-810)
850	983		Red bed
983	995		Red sand
995	1024		Red bed
			}
			L S Elev 3936
		-	Depth to KTrc/3 Elev of KTrc_39.2/
		_	

Section 7. REMARKS AND ADDITIONAL INFORMATION

This well record is an excerpt from Oil Conservation Commission files at Hobbs, N.M.

Locatio	m: 17.32.26.4	1000	
Owner:	Continental/00	il Co.	
	MCA Batter	у 4	#189
Record	of Casing: 8	1/4"	- 1062'

Cable

1980' FSL--1980' FEL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

Elevation: 3936' DF

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district office of the State Engineer. A provide the state Engineer. A provide the state of the state Engineer is the state of the state o

Revised June 1972

STATE ENGINEER OFFICE WELL RECORD

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Section 1. GENERAL INFORMATION

		າດລູ 11 ທີ່ຕ					Owner's	Well N	0	
Owner of w Street or Pr	ell <u> </u>	ess 370	0 Kermi	t Hwy.						
City and St	ale	<u>U</u> Ue		· · · · · · · · · · · · · · · · · · ·						
ut was deillad i	under Permit No	0 <u>RA-1</u>	0175		and is to	cated in	the:			
II WIS OFTICO C				- 28	Towns	hin 1	<u>75 (</u> Range	3	2E	_N.M.P.M.
8	% %	<u>NS % NS</u>	- % of Secti	011	- 10412					
b. Tract N	o	of Map No		of the .		<u></u>				
	_	Diesk No		of the						
c. Lot No. Subdivi	sion, recorded i	in		Co	ounty.		-		-	
		A . N.		feet N b	4. Coord	inate Sy	/stem		<u> </u>	Zone in
* * *										
		Alan Fade	e				License No. <u>WI</u>	10	44	
) Drilling Co	ontractor	Alan Bade								
ddress <u>12</u>	<u>00 E. Be</u>	nder Blvd	Hobb	os, NM 8	8240	<u></u>	<u> </u>	· *		
rilling Began	2-4-02	Comple	sted2-4	1-02	_ Type to	ols	rotary	Siz	e of hole <u>/</u>	<u>_//8</u> _in
				at well	} is		ft. Total depth (of well.	158	ft
evation of lan			•							
ompleted well	is 🕅 sha	allow 🗔 art	esian.		Depth to	o water	upon completion	of well		11
		Sectio	on 2. PRINC	IPAL WATER	R-BEARI	ING ST	RATA			
Depth i	n Feet	Thickness		escription of					Estimated allons per n	
From	To	in Feet	D	escription of	Water-De			(81	mons per n	111476)
87	89	2	Sand	& Grave	1					
89 -	116	27	Sandy	<u>yellow</u>	<u>& b</u>]	ue C	lav			
116	124	8	Hard	gray sh	ale					
				<u></u>			~			
				3. RECORD]	Perfo	ations
Diameter	Pounds	Threads per in,	Depth i Top	n Feet Bottom	Len ((e	et)	Type of Sho	e	From	To
(inches)	per foot	per m	100							15
5 3/4	<u>160psi</u>				158		· · · · · · · · · · · · · · · · · · ·		118	1
										<u> </u>
					1					-
									L	
		Sectio	on 4. RECOF	D OF MUDE	DING AN	D CEM	ENTING			12
Depth	in Feet	Hole Diameter	Sack of Mu	~ 1	lubic Fee of Comer		Meth	od of H	Placement	
From	То	Diameter	Of MIC							1.1
			· .							
		<u></u>	<u> </u>						13	
]	<u> </u>				- <u> </u>			
÷.,			. Sectio	n 5. PLUGGI	NG REC	ORD				
Plugging Conti Address				-		No,	Depth ir			ubic Feet
Plugging Meth	od		-			مصحصه مصحف الم	Top	Bott	om	of Cement
Date Well Plug						<u> </u>	++	<u> </u>		
Plugging appro	······				[3				
		State Eng	ineer Repres	entative		4	1		<u>_</u>	
general namejon and defenyed and an angenerati	~~ k1.1~	8n A	FOR USE	OF STATE 8	INGINE	ER ON	LY -78	F Əð	72219	5/
Date Received	03/06/2 PH-1017		-				TTU/f		FS	L
	1/10 1015	5		Qua Srnk 4 S	IG			200	28,1	3

Use Drnk & San Stary Lee No 195.3

	Darath	in Feet	A	
	Deptil	То	Thickness	Color and Type of Material Encoup
	0	1	1	Top Soil
	1	8	7	Sand w/ clay & Sandstone Stringers
		44	36	Sand & Sandstone Stringers
	44	55	11	Sandy Red Clay
	55	87	32	SAndy yellow & blue clay
		89	2	Sand & Gravel
		116	27	Sandy yellow & blue clay
	116	124	8	Hard gray shale
	124	158	34	Yellow, blue & red clay
-	•			
		· · · · · ·	/	
	· · · ·			
				-
			· · · · ·	
			<u>_</u>	
	-			

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

t Driller lindie Q

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

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Section 1. GENERAL INFORMATION

Street or F	ost Office Ad	dress				Owner		· · · · · · · · · · · · · · · · · · ·
-		No				in the:		
я	Va		¼ of Secti	on	_ Township	Ranj	ge	N.M.P.J
c. Lot No		of Block No		of the				
Subdiv	ision, recorded	1 in		Co	ounty.			
d. X= the		_ feet, Y=		feet, N.M	f. Coordinate	System		Zone Zone
) Drilling Co	ontractor		<u> </u>			License No		
ldress								
illing Began _		Comp	leted		Type tools		Size of ho	lei
evation of lan	d surface or _	· · · · · · · · · · · · · · · · · · ·		at well	. is	ft. Total depth	of well	i
		hallow 🗔 a				r upon completion		
•			ion 2. PRINCI	PAL WATER	-BEARING S	FRATA		
Depth i		Thickness in Feet			Vater-Bearing I			ted Yield ber minute)
From	To	In Feet	· · · · · · · · · · · · · · · · · · ·					
	<u></u>			·				
[
							-	
<u></u> l.		·····	Section	3. RECORD	OF CASING			
Diameter	Pounds	Threads	Depth in		Length	Type of Sho	e	erforations
(inches)	per foot	per in.	Тор	Bottom	(feet)		From	n <u>To</u>
				···	<u>.</u>			
			<u> </u>			ļ		
		Sectio	on 4. RECORI	D OF MUDDI	ING AND CEN	IENTING		
Depth		Hole	Sacks of Mud	Cı	ibic Feet Cement		od of Placeme	nt
From	То	Diameter	Of Mut		Centent			<u></u>
			ļ	······				
			0		C BECORD			
				5. PLUGGIN	IG RECORD			
		······································				Depth in		Cubic Feet
	od		······			Top	Bottom	of Cement
ate Well Plugg	yed by:							
ugging appro		State Fra	ineer Represen	itative		1		
ugging appro-		June Die	-					
utaging appro-				F STATE EN		LY		
augging appro	Typed	5/11/78			IGINEER ON	LY FWL _		

File No.

	in Feet	Thickness	Color and Type of Material Encountered
From	То	in Feet	
0	70		Surface sand
70	190		Red bed
			· ·
			· · · · · · · · · · · · · · · · · · ·
		<u> </u>	18 Flay 3937
	-		Depth to K Trc 20
			L S Elev 3737 Depth to KTrc 70 Elev of KTrc 386 7
		-	
			· · · · · · · · · · · · · · · · · · ·
		1	· · · · · · · · · · · · · · · · · · ·
	······		
			·
		-	
	·· <u> </u>		

This well record is an excerpt from Oil Conservation Commission files at Hobbs, N.M.

	-
2	#109
~	873'

Cable

660' FNL - 660' FWL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

Elevation: 3937' GR

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. A possible when any well is drilled, repaired or deepender when this form is used as a plugging record, only Section 1(a) and Section a need be completed.

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NED & NEODUATION

) Owner of w Street or Po	ell ost Office Ad	dress		· · ·			Own	er's Well N	0	
						· · · · · · · · · · · · · · · · · · ·	•			
ll was drilled u	nder Permit	No			and is locat	ed in the:	-			
a	14 14	¼	¼ of Sec	ction	Township	. <u></u>		inge		N.M.P.
b. Tract No),	of Map No.		of th	ı¢	m				
.c. Lot No.		of Block No I ín		of th	e			····		
						te Svetem				Zone
a.		_ feet, Y=		reet, r				,		Gran
) Drilling Co	ntractor					Licer	nse No.⊥			
ldress						·			· ·	
illing Began		Comp	leted		Type tools	<u></u>		Size	of hole_	i
evation of land	surface or _	-		at w	ell is	ft. T	otal dept	h of well_		
mpleted well i	s 🗆 st	hatlow 🗆 a	rtesian.		Depth to wa	ter upon c	ompletic	n of well_		t
		Sect	ion 2. PRIN	CIPAL WAT	ER-BEARING	STRATA	· · · · . - · - · -			
Depth in From	Feet To	Thickness in Feet	I	Description o	f Water-Bearin	g Formatio	n		stimated lons per	Yield minute)
		<u>.</u>								
		J	Sectio	n 3. RECOR	D OF CASING	;				
Diameter	Pounds per foot	Threads per in.		in Feet	Length (feet)	T	/pe of Sl	106	Perfo From	orations To
(inches)		per m.	Тор	Bottom						
				i						-
		· · · · · · · · · · · · · · · · · · ·				- +				
		Santi			DING AND C	EMENTIN	 G	<u></u>		_1_
Depth in		Hole Diameter	Sacl of M	٢s	Cubic Feet of Cement			hod of Pla	cement	
From	То	Diamotei		<u>.</u>	ur centent					
		1					t			
	-				·····		<u> </u>			
				. <u></u>		<u> </u>		-		
		-	Sectio	on 5. PLUGG	ING RECORD	>	-			
ugging Contra ddress				· · · · · · · · · · · · · · · · · · ·	No		Depth i	n Feet		lubic Feet
ugging Method ate Well Plugge	l	· .				<u> </u>	op	Botton		of Cement
ugging approve				• •	2					
		State Eng	gineer Repres	entative						
		5/11/78	FOR USE	OF STATE	ENGINEER O	NLY				

File No.__

Depth i	n Feat	TL2.1	Section 6. LOG OF HOLE
From	To	Thickness in Feet	Color and Type of Material Encountered
0	85		Surface sand and caliche
85	1.05		Sandstone
105	755		Shale
			· ·
	V		
			10 m 398N
		·	Depth to K793
			LS Elev 3984 Depth to K7rc105 Elev of K7re3877
	}		
T			·
			· · · · · · · · · · · · · · · · · · ·
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l		. (

Section 7. REMARKS AND ADDITIONAL INFORMATION

This well record is an excerpt from 011 Conservation Commission files at Hobbs, N.M.

Location: 17.32.29.24000 Owner: Continental Oil Co. MCA Unit Battery 2 #154 Record of Casing: 8" - 860' Cable

1980' FNL - 660' FEL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted tracke appropriate district office of the State Engineer. A construction 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deependence when this form is used as a plugging record, only Section 1(a) and Section Theed be completed.

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÷ 1,

Driller

Elevation: 3984' DF

200

			Section 1.	GENERAL IN	IFORMATION			
(A) Owner of Street or City and	Post Office Ad	dress				Owner's	Well No	
Well was drilled	under Permit	No			_ and is located i	in the:		
a	_ ¼ ¼		¼ of Sec	tion	Township	Range	- <u>-</u>	N.M.P.M.
b. Tract	No	of Map No		of the	<u></u>			
c. Lot N	J	of Block No		of the				
		l in				vetam		Zone in
d. X= the	· · ·	_ reet, Y=				ystem		Grant.
						_ License No,		
Elevation of la	nd sufface or _			at wel	l is	_ ft. Total depth of	well	ft.
Completed wel	Lis 🗆 st	hallow 🗆 ar	tesian.		Depth to water	upon completion of	f wei)	ft.
ŧ		1	ion 2. PRINC	CIPAL WATE	R-BEARING ST	RATA	Estimated	Vield
Depth From	in Feet To	Thickness in Feet	D	escription of	(gallons per minute)			
<u></u>			Section	n 3. RECORD	OF CASING			
Diameter (inches)	Pounds per foot	Threads per in.	Depth Top	in Feet Bottom	Length (feet)	Type of Shoe	Perf From	orations To
	1		^					
L	I	Sectio	n 4. RECOE	RD OF MUDD	ING AND CEM	ENTING	I	
	in Feet	Hole Diameter	Sack of Mu	s C	ubic Feet f Coment		of Placement	
From	То	Diamotor				<u></u>		
	· · · ·			· · · · · · · · · · · · · · · · · · ·				
						********	i	
							<u>.</u>	
			Sectio	n 5, PLUGGfi	NG RECORD			
Plugging Cont Address	ractor			· · ·	No.	Depth in F		Cubic Feet
Plugging Meth Date Well Plug		· · · ·		· · · · · · · · · · · · · · · · · · ·		Top	Bottom	of Cement
Plugging appro								
		State Eng	ineer Repres	entative	4	1		

FOR USE OF STATE ENGINEER ONLY

Date Received	Typed	5/11/78	
			Quad FWL FSL
		:	011 17 32 20 32000
File No.			Use 011 Location No. 17.32.29.32000

L

Depth in		Thickness	Color and Type of Material Encountered
From	To	in Feet	Color and Type of Material Encountered
0	55		Sand and caliche
55	350		Red mud
350	470		Red shale
			Not allate
			· · · · · · · · · · · · · · · · · · ·
	V		
			L S Elev
			Depth to K Trc 55
		. {	Elev of K
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		<u>.</u>	· · · · ·
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<u>}</u>			
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{	ł		
· · · · · · · · · · · · · · · · · · ·			
			7. REMARKS AND ADDITIONAL INFORMATION
This well	record is	an excerp	t from Oil Conservation Commission files at Hobbs, N.M.
Location:	17.32.29		Elevation: 3933
Owner: Co	MCA Unit	Battery 2	#170
Record of	Casing:	8"	- 990'
Cable			
1980' FSL	- 1980' F	WL	
		-	· ·
.,	1		
V			
The undersigned lescribed hole.	hereby certif	ies that, to the	best of his knowledge and belief, the foregoing is a true and correct record of the abo

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district office of the State Engineer. A finite interview is the second of the state of the state engineer is a state of the state engineer of the state engineer. A finite is the second of the state engineer of the state enginter of the state engineer of the s

Kevised June 1972

-tion	1	CENER	٨	г	INFORMATIO	N

			Section 1	, GENERAI	. INFOR	MATION		•		
Street or F	ost Office Ad	dress						's Well No		
Well was drilled										
a,	. ¼ ¼	¼	¼ of Se	ction	To	wnship	Ran	ge	N,M.P.M.	
b. Tract N	lo	of Map No.	<u> </u>	of	the					
c. Lot No		of Block No		of	the					
		l in							Zone in	
d. X≈ the		_ feet, Y=		leet,	N.M. CC				Zone in Grant.	
(B) Drilling C	ontractor		<u></u>				License No			
Address							· · · · · · · · · · · · · · · · ·	,	• • •	
Drilling Began _		Comp	leted		Тур	e tools		Şize of h	olein.	
									ft.	
Completed well									ft.	
completed wer			tion 2. PRIN	ICIPAL WAT				-		
Depth i	n Feet	Thickness						Estimated Yield		
From	То	in Feet		Description of Water-Bearing Formation				(gallons per minute)		
					<u> </u>					
		} 						· · · · · · · · · · · · · · · · · · ·		
	<u></u>			<u></u>			<u> </u>			
				on 3, RECO	RD OF C	ASING				
Diameter (inches)	Pounds per foot	Threads per in.	Depth Top	in Feet Bottom		Length (feet) Type of Sh		e Fro	Perforations om To	
(incirca)	per loot	por int.	100	Botton	· · · · · ·	· · · · ·				
					· · · ·					
		[
Dep th	in Feet	Secti Hole	on 4, RECO Sac		DDING . Cubic l			(C D)		
From	То	Diameter	of M				Method of Placement			
									·	
		······································			·····					
	<u>-</u>		". [•		
				on 5. PLUG	GING R	ECORD				
Plugging Contr Address						No.	Depth in		Cubic Feet	
Plugging Metho	>d					·	Тор	Bottom	of Cement	
Date Well Plug Plugging appro						2		······································		
· weeking appro						3			_	
		State Eng	gineer Repre	sentative		4	L_		l	

FOR USE OF STATE ENGINEER ONLY

			F
Date Received	Typed	5/11/78	

File No._

Quad ______ FWL _____ FSL_

1- -

Use 011 Location No. 17.32.29.33000

Depth i		Thickness	Color and Type of Material Encountered
From	<u> </u>	in Feet	
0	45		Sand and caliche
45	85 /		Red sand 2
85	125	****	Caliche
125	400	-	Red bed
	·		<u>'</u>
]	V		
		[3919
			L S Elev 39/9 Depth to KTrc3
		· · · · · · · · · · · · · · · · · · ·	Elev of K7
	<u>.</u>		
			· · · · · · · · · · · · · · · · · · ·
	<u></u>		······································
		<u> </u>	
		· · · · · · · · · · · · · · · · · · ·	
			· · · · · · · · · · · · · · · ·
	····		
<u> </u>]	Baction	
			7. REMARKS AND ADDITIONAL INFORMATION
This well	record 1	s an excer	pt from Oil Conservation Commission files at Hobbs, N.M
Location:		9.33000	Elevation: 4091' DF _{OK}
	MCA Uni	1 Oil Co. t Battery	2 -4124 Topo. Elev. 3909
Record of			- 1050' DF Elev. 3919
Cable			Ser agreen to be diff. Course
660' FSL	- 660' FW	LOK	
		Y/	· · ·
V	/		

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district office of the State Engineer. Alternoons, except Section 5, shall be answered as completely and accurate drilled, repaired or deepend when this form is used as a plugging record, only Section 1(a) and Section are deepended.

214.7

Driller

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Section 1. GENERAL INFORMATION

(A) Owner of	well	drare .	·	: * *			s Well No				
City and	State										
Well was drilled	under Permit	No			and is located	in the:					
a	_ ¼ ½	4¼	¼ of Se	ction	Township		e	N.M.P.M			
b. Tract l	No	of Map No),	of th	e						
e, Lot Ne Subdiv	o vision, recorde	of Block No. d in		of th	e County.						
					.M. Coordínate	System		Zone in Grant			
			• •			License No					
Address					,						
Drilling Began .		Con	npleted		_ Type tools _	<u></u>	Size of hole	in			
Elevation of lar	nd surface or _			at well is ft. Total depth of well ft							
Completed well	Lis 🗔 s	shallow 🗖.				r upon completion c	of well	ft			
Depth	in Feet	Se Thicknes	19		R-BEARING S		Estimated				
From.	То	in Feet		Description of Water-Bearing Formation (gallons per minute)							
					<u> </u>						
	·						<u> </u>				
		<u>]</u>	<u>.</u>								
		Thereda		n 3. RECORI in Feet	OF CASING		Perfo	Perforations			
Diameter (inches)	Pounds per foot	Threads per in,	Тор	Bottom	(feet)	Type of Shoe	From	To			
								<u> </u>			
	L	Sec	tion 4. RECO	RD OF MUD	DING AND CEN	(ENTING					
	in Feet	Hole Diameter	Sac	ks (Cubic Feet	Method of Placement					
From	То						·····				

Section 5. PLUGGING RECORD

Plugging Contractor		Depth	in Feet	Cubic Feet
Plugging Method	No.	Тор	Bottom	of Cement
Date Well Plugged	1	· ·	·	· · · · · -
Plugging approved by:	2		[
	3			
State Engineer Representative	4	L	L	1

FOR USE OF STATE ENGINEER ONLY

Use 011

Date Received	Typed	5/11/78	FOR USE OF STATE ENGINEER ONLY
			Quad

File No.

FWL ____ _ FSL_ Location No. 17.32.30.13000

10

Depth in		Thickness	Color and Type of Material Encountered	
From	То	in Feet	,	
0	50		Surface formation 7	
50	575		Red bed	
575	580		Shale (water)	
580	675		Red bed	
675	810	· · · · · · · · · · · · · · · · · · ·	Anhydrite	
810	820	<u> </u>	Sand water	
		. <u>.</u>		
ł			LS Elev 3 8 95	
			Depth to K	
			Elev of KTrc_3845	- •
		{ 	· · · · · · · · · · · · · · · · · · ·	
				,
	7	<u>_</u>		
				······
			· · · · · · · · · · · · · · · · · · ·	
		. <u> </u>	:	
			·	
	-		· ·	
/		Section	1 7. REMARKS AND ADDITIONAL INFORMATION	
			-	
This well	record is	s an excer	pt from Oil Conservation Commission files at	Hobbs, N.M.
Location: Owner: Co			Elevation: 3895	'DF
	MCA Unit	t Battery		
Record of	Casing:	8" .	- 870 '	
Cable				
1980' FNL	- 660' FI	√L,		
	-			
~				
he we decide of	have been and the			
he undersigned escribed hole.	nereby certif	ies mat, to the	e best of his knowledge and belief, the foregoing is a true and corr	ect record of the
			e e e e e e e e e e e e e e e e e e e	
			Driller	

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STATE ENGINEER OFFICE WELL RECORD

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levised	Jane	18	72

1 GENERAL INFORMATION ...

	14							s Well No.		
) Uwner of	well Post Office Ad	dress					Owner's			
City and	State									
-										
ll was drilled	under Permit	No		·		ind is located	in the:			
							Rang			
							<u> </u>			
c. Lot N Subdiv	o vision, recorded	of Block No l in		0	f the Cou	inty.		2 m / m		
d. X≃		_ feet, Y	· · · · · · · · · · · · · · · · · · ·	fee	t, N.M	. Coordinate S	System		Zone i	
the			· · · · ·	·					Gian	
	Contractor						_ License No	<u> </u>	_,,	
evation of lar	nd surface or _			a	t well i	s	_ ft. Total depth o	of well	f	
mpleted wel		1allow □ a					upon completion (
		Sect	ion 2. PRINC	CIPAL W	ATER-	BEARING ST	RATA			
Depth	in Feet	Thickness	n	escriptio	n of Wa	ater-Bearing F	ing Formation (gallons per minute)			
From	<u> </u>	in Feet						(guitono pro		
		}								
<u></u>										
							: <u></u>	· <u></u>		
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		ł	ļ							
	l=									
			Section	n 3. RECO	ORD O	F CASING	·	D. C.		
Diameter	Pounds	Threads	Depth			Length (feet)	Type of Shoe	From	rations To	
(inches)	per foot	per in.	Тор	. Botto	m	(1881)		From	<u> 10</u>	
									ļ	
				·		······································				
					1				ļ	
		<u> </u>	·						<u> </u>	
		Santi	on 4 RECOI	2D OF M	иори	IG AND CEM	ENTING			
	in Faat	········	Sack			nic Feet				
Donth		Hole Diameter	of Mu			Cement :	Metho	d of Placement		
Depth										
Depth From	To									
A										
A									<u></u>	
A							-			
A									 	

Plugging Contractor _ Depth in Feet Cubic Feet Address _ No. Bottom of Cement Plugging Method ... Top t Date Well Plugged Plugging approved by: 2 3 State Engineer Representative 4

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Use.

Date Received	Typed	5/11/78

Quad

_ FWL ____ _____ FSL_

File	εN	o	

__ Location No.__ 17.32.30.33000 L

Depth in Feet		Thickness			
From	То	in Feet	Color and Type of Material Encountered		
0	50		Surface sand and caliche		
50	545		Red bed and red rock		
545	590	· 、	Red bed, sandy		
			· · · · · · · · · · · · · · · · · · ·		
Ĩ			3041		
	······		LStiev 28//		
			L S Elev 387/ Depth to K		
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			, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1		
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<u> </u>					

This well record is an excerpt from Oil Conservation Commission files at Hobbs, N.M.

Location: 17.32.30.33000	
Owner: Continental Oil Co.	
MCA Unit Battery	1 #218
Record of Casing: 10 3/4"	- 68
8 5/8"	- 1018
Cable	

Elevation: 3871' DF -

Driller

660' FSL - 660' FWL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to see appropriate district office of the State Engineer. Alternations, except Section 5, shall be answered as completely and accurate possible when any well is dtilled, repaired or deepender then this form is used as a plugging record, only Section 1(a) and Section theed be completed.

						······
	2		STATE EN	GINEER OFFICE		Revised June 1977
			WEL	L RECORD		
		S	ection 1. GEN	ERAL INFORMATION		÷.
(A)	Owner of well Street or Post Office Ad City and State	dress			Owner	's Well No.
Well	was drilled under Permit	No		and is located	in the:	
1	a ¼ ¼	¼	. ¼ of Section_	Township	Ran	geN.M.P.N
	b. Tract No	of Map No		of the	·	
	c. Lot No Subdivision, recorded	of Block No 1 in	······································	of the County.	•	<u> </u>
	d. X=	_ feet, Y=		feet, N.M. Coordinate S	System	Zone i
(B)						
Add	ress			· · · · · · · · · · · · · · · · · · ·		
	•					Size of holei
Eiev	ation of land surface or _			at well is	ft. Total depth	of well f
Сол	pleted well is 🔲 si	nailow 🔲 artes	ian.	Depth to water	upon completion	of well f
		Section	2. PRINCIPAL	, WATER-BEARING ST	RATA	
	Depth in Feet From To	Thickness in Feet	Descrij	otion of Water-Bearing F	ormation	Estimated Yield (gallons per minute)

ŧ

(A)

4

Depth ir	i Feet	Thickness	Description of Water-Bearing Formation	Estimated Yield (gallons per minute
From	To	in Feet	Description of neuronal description	(guitons por influeto
			· · · · · · · · · · · · · · · · · · ·	
<u></u>	!- <u></u>			
		<u></u> * ;		
	ł			
			Section 3. RECORD OF CASING	

Diameter	Pounds	Threads	Deptl	1 in Feet	Length	Type of Shoe	Perforations		
(inches)	per foot	per in.	Тор	. Bottom	(feet)	Type of Supe	From	То	
							· ·		
) .			<u>.</u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>		
							1 [
	-								
						: <u></u>			

Section	4.	REC	ORD	OF	MUDDING	AN	D	CEMENTING

			if itebe even		
Depth i		Hole			Method of Placement
From	To	Diameter			
		1			
			·		
		1			
					· · · · · · · · · · · · · · · · · · ·
1			-	· ·	
		1 1			

Section 5. PLUGGING RECORD

Plugging Contractor			Depth	in Feet	Cubic Feet
Plugging Method		No.	• Тор	Bottom	of Cement
Date Well Plugged	 · · · · · · · · · · · · · · · · · · ·	1	• • • • • •		
Plugging approved by:		2			
	State Engineer Representative	4			

FOR USE OF STATE ENGINEER ONLY

			FOR USE OF STATE ENGINEER ONLY
Date Received	Typed	5/11/78	Oued FWI FSI
			Quad FWL FSL
	4 - 4 -	÷	Use 011 Location No. 17.32.34.241111
File No			

Depth i		Thickness in Feet	Color and Type of Material Encountered
From	To		
0	64	- 	Sand and caliche
64	82		Red bed
82	792		Sand, red, and shale
,			
			·
		<u> </u>	
	1		LS Elev 396.2 DF
	-		Depth to KCH
			Flev of KIrc270
			· · ·
		- <u></u>	
			<u> </u>
			· · · ·
			·
			<u> </u>
-			
	L	Section 1	7. REMARKS AND ADDITIONAL INFORMATION
his well	record 4-		
_			ot from Oil Conservation Commission files at Hobbs, N.M.
Location: Numer: Co	17.32.34 ontinental	.241111 011 Co.	Elevation: 3952 Sea Level
Record of	Pearsall	BX #2	- 59'

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

13451 FNL - 1295' FEL

1

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. Although ons, except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deepender, then this form is used as a plugging record, only Section 1(a) and Section relead be completed.

Driller

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SECTION

TOWNSHIP 175 RANGE 33E

Form WR-23



STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Section 1	(A) Owner of well MARTON DRILLING	COMPANY
	Street and Number Rox 2807	
	CityOdogag	State
	Well was drilled under Permit No.	and is located in the
	<u>143514F714</u> of Section	Twp 17 2 Rge 33 E
	(B) Drilling Contractor Abbott Brothe	License No. HD#46
	Street and Number Box 637	· · · · · · · · · · · · · · · · · · ·
	City Robbs	State <u>New_Moxico</u>
	Drilling was commenced	ocember 10 19 57
	Drilling was completed	lecember 19 31 19 57
(Plat of 640 acres)	•	

Elevation at top of casing in feet above sea level______Total depth of well_____State whether well is shallow or artesian______Depth to water upon completion_____State shallows.______Depth to water upon completion_____State shallows.______Depth to water upon completion______State shallows.______Depth to water upon completion_______State shallows.______Depth to water upon completion______State shallows._______Depth to water upon completion______State shallows.______Depth to water upon completion_______State shallows.______Depth to water upon completion_______State shallows._______Depth to water upon completion_______Depth to water upon completion______Depth to

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth	in Feet Thickness in		Description of Water-Bearing Formation
INO.	From	То	Feet	Description of Water-Scaling Formation
1	150	180	30	Weder Band
2				
3				
4]			
5		· · ·		

	nds Thre	eads	Depth		Feet	Type Shoe	Perforations		
in. ft	ft. in	1 T	op B	lottom		11100 0000	From	То	
7 1	.6	10	0	180_	140	plain	150	160	
			·						

Section 4

Plugging approved by:

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter	Tons	No. Sacks of	Methods Used		
From	То	Hole in in.	Clay	Cement	Methods Used		
		++					
1							

Section 5	PLUGGING RECORD		
Name of Plugging Contractor_	·	License No	·
Street and Number	City	State	······
Tons of Clay used	Tons of Roughage used		
Plugging method used		Date Plugged	

		_	No.	Depth	of Plug	No. of Sacks Used
	Basin Supervisor		110.	From	То	NO. OI SACKS USED
For USE OF	STATE ENGINEER ONLY					
Date Received	DEC 30 1957					·····
Date Received	OFFICE GROUND WATE CUPERVISOR ROSWELL NEW MEXICO					
File No. 2-3	753Use	0.0	ک ()	cation No.	17.33.1.190

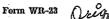
Section 6

LOG OF WELL

Depth in Feet		Thickness in Foot Color		Type of Material Encountered				
From	To	in Feet	Color	The a manual furthing of				
0	4	1		8011				
1	20	19	· ·	coliche				
20	150	190		dry sand				
150	130	30		water sand				
		l l	· · · · · · · · · · · · · · · · · · ·					
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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

Well Driller



5.5

STATE ENGINEER OF



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed. Section 1

r i			A) Owner of well Denver Drilling Company
			Street and NumberBox 669
:	5		City Odeasa StateState
			Well was drilled under Permit No. 1-3782 and is located in t
		241-4	_SE4_SE4_SE4 of Section 8 Twp 17 S Rge 13 E
· ·			(B) Drilling Contractor. Carten Drilling Co. License No. 50-183
			Street and Number Box 1021
}	<u>[.</u>		City State New Maxies
		1	Drilling was commenced Fab. 6 19_58
	<u> </u>	<u> </u>	Drilling was completed Feb. 8

(Plat of 640 acres)

Total depth of well Elevation at top of casing in feet above sea level..... 389 State whether well is shallow or artesian Shallow Depth to water upon completion 151

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth From	in Feet To	Thickness in Feet	Description of Water	-Bearing Formation	
1	252	170	10	Water Sand		:
2	176	183		Nator Sand		
		A				
4					· · · · · · · · · · · · · · · · · · ·	•
5						

___

Section 3 RECORD OF CASING									
Dia Pounds		Threads	D	Depth Feet		Type Shoe	Perforations		
in.	1	in	Top	Bottom	reci	TADE PIDE -	From	То	
6.5/8	17	10	0	283	184	Naza	260	183	
-1					· · · · · ·				
		· .							
								,	

Section 4

RECORD OF MUDDING AND CEMENTING

-	in Feet	Diameter	Tons	No. Sacks of	Methods Used	
From	То	Hole in in.	Clay	Cement	inditious useu	
18	183	30	LOO Ibs.		Dry Niz - Hole Graval Peaked	
1		· · ·	-			
·i	 					

Section 5 PLUGGING RECORD Name of Plugging Contractor... License No. Street and Number.... City___ State Tons of Clay used..... Tons of Roughage used ...Type of roughage_ Plugging method used... 19

Plugging approved by:

____Date Plugged__

	No.	Depth	of Plug	No. of Sacks Used
Basin-Supervisor		From	То	NO. OF BACKS OSER
FOR USE OF STATE ENGINEER ONLY	[
Date Received FEB 2 0 1958		·	·	
				······································
ROSWELL, NEW BAKEO		CO. BARANCE		
use (0. کیچ	<u>P</u>	Lo	cation No.	17.33.2.444

	,		·	
Section 6			LOG	OF WELL
Depth i	in Feet	Thickness		
From	То	in Feet	Color	Type of Material Encountered
0	-1	7		Soll
		2		Rock
<u>i</u>	4	8		Callons
				Boulder
%2	- 18	6		
	- 25	8		
26	80	<u>Fli</u>		Derter Awer
	151	71	· · · · · · · · · · · · · · · · · · ·	Dry Sand
353	170	22		Watar Sana
170	176	· . 6		Sandy Clay
176_		7		Water Sand
			· · ·	
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	4	а 	52 ·	
	1.7 3.			
The unders rect record	igned herel of the abov	y certifies t ve described	WCIL	is knowledge and belief, the foregoing is a true and CAYFON HATER WELL DRILLING COMPANY
		•		Well Driller Trady Backers
	•		• .	from the state
		. 4 <u>.</u>		
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• • • •	· 2.55	:		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
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STATE ENGINEER OFFICE WELL RECORD



Section 1. GENERAL INFORMATION

(A)	Owner of wellYat	tes Petrole	um .	•			Owner's We	II No	
	Owner of well I at Street or Post Office A	idress 105 S	outh 4th.	Stre	et				
	City and State	I <mark>rtesia, Ne</mark>	w Mexico	8821	0				
Well	was drilled under Permit	No10,2	12		and is located	l in the:			
	a ¼ ½	4 <u>SE</u> % <u>SE</u>	4 of Section_	2	_ Township	17-S.	_ Range	<u> 33- E</u>	N.M.P.M.
	b. Tract No.	of Map No		of the					
	c. Lot No Subdivision, recorde								
	d. X=								
(B)	Drilling Contractor	Glenn's W	ater Well	Serv	ice, Inc	• License N	0	WD 421	
Addr	ess P.O. Box 6	92 Tatum, 1	New Mexic	o 88.	267				
Driilļi	ng Began <u>7-7-94</u>	Complete	ed <u>7-7</u> -	-94	Type tools	rotary	S	ize of hole_1	<u>4 3/4</u> n.
Eleva	tion of land surface or _			at well	is	ft. Total o	lepth of we	<u>11. 273</u>	ft.
Com	pleted well is 🛛 s								
	·····	Section				RATA			
1	Depth in Feet	Thickness						Estimated Y	ield

Depth	Depth in Feet		Description of Water Descine Forwatter	Estimated Yield
From	То	in Feet	Description of Water-Bearing Formation	(gallons per minute)
168	268	100	sand	120
			······	

Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet		Length	Type of Shoe	Perfor	Perforations	
(inches)	per foot	per in.	Тор	Bottom	(feet)	Type of Shoe	From	То	
8 5/8	.250		<u> </u>	273	273	none	153	273	
							-		

Section 4. RECORD OF MUDDING AND CEMENTING

Depth i	Depth in Feet		Sacks	Cubic Feet	
From	То	Diameter	of Mud	of Cement	Method of Placement
		· · · · · · · · · · · · · · · · · · ·			
-					

Section 5. PLUGGING RECORD

Plugging Contractor		-			
Address	· · · · · · · · · · · · · · · · · · ·		Depth	in Feet	Cubic Feet
Plugging Method		No.	Тор	Bottom	of Cement
Date Well Plugged	· ····································				
Plugging approved by:	· .	2			
	State Engineer Representative	- 3			
		4	<u> </u>	· ·	

Date	Received	07/13/94

FOR USE OF STATE ENGINEER ONLY

	Quad FWL FSL	
File No	secondary recovery of Use <u>011-water flood</u> Location No. <u>175.33.2.44423</u>	

Depth in		Thickness	. Color and Type of Material Encountered
From	To	in Feet	
0	1		soil
<u> </u>	27	26	caleche
27	168	141	sand and rock with stringers of clay
168	268	100	sand (water)
268	273	5	red clay
		<u> </u>	· · · · · · · · · · · · · · · · · · ·
		[
			· · · · · · · · · · · · · · · · · · ·
	<u></u>		
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	0 	Section 7. R	EMARKS AND ADDITIONAL INFORMATION
···· • •	· .·· - ··		······································
undersigned l cribed hole.	vereby certif	lies that, to the best	t of his knowledge and belief, the foregoing is a true and correct record of the
			lorky tem
			In triplicate, preferably typewritten, and submitted to the appropriate distriction 5, shall be answered as completely and accurate possible when any



STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

I	11	•
-190	tion	

r	(A) Owner of well output with the source of
0	Street and Number 200 Carpor Butleting
	City State State
	Well was drilled under Permit Noand is located in the
	Kge Kge Rge Rge
	(B) Drilling Contractor
	Street and Number Prove Store
	City State State
	Drilling was commenced 19 19
(Plat of 640 pares)	Drilling was completed 19 62

(Plat of 640 acres)

DATA OZI MELEN

ing corpany

6. 2

Elevation at top of casing in feet above sea level Total depth of well State whether well is shallow or artesian _____Depth to water upon completion_____ 102

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in	Description of Water-Bearing Formation			
	From	To	Feet	Description of Water-Bearing Formation			
1	182	0et	.80	the have suited			
2			10 ¹ 0 ¹ 0 ¹				
3							
4							
5							

Section	3				D OF CAS	ING		
Dia F	Pounds	Threads	Depth		Feet	Tree Ches	Perforations	
ļn.	ft.	· in	Top	Bottom	"t ser	Type Shoe	From	To
7	30	10	Ø	197	197	ngne	100	197
		·						
			· ····································		<u></u>			

ction 4
cuon 4

RECORD OF MUDDING AND CEMENTING

Depth in		Diameter	Tons	No. Sacks of	BF-11-1-1
From	То	Hole in in.	Clay	Cement	Methods Used
					······································
(

DECTION :	S	ection	Ę
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PLUGGING RECORD

Name of Plugging Contractor.		License No	
Street and Number	Çity	State	
		Date Plugged	
Plugging approved by:		Cement Plugs were placed as fo	

	No.		of Plug	No. of Sacks Used
Basin Supervisor		From	То	Hor of Dacks Osed
FOR USE OF STATE ENGINEER ONLY				
I I LOIVISIO 🔪				
Date Received 2014/0 VI3ENIONE 21VIS				·
62:8 NV 617nr 2951 🖉				2880-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
1-2935 2011	か			17 33 2 124
File No. L-4755 Use Dew	<u>. </u>	Lo		17.33.2.120
enan ananyaan aana ahaan ah				
· AUD - AV				

Section 6

From	in Feet	Thickness in Feet	Color	Type of Material Encountered
<u> </u>			· · · · · · · · · · · · · · · · · · ·	
<u> </u>				5
				·
				· · · · · · · · · · · · · · · · · · ·
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20	<i>08</i>			lant sond, poak
<i>\$6</i>	22	\$		hard pand
71	78	**		joese servi
78	103	84		jean aans
142	201	.99		
201	204	.9		tight sand
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		<u> </u>		·
e unders	igned here	by certifies that	t, to the best of hi	s knowledge and belief, the foregoing is a true and c
t record:	of the abov	ve described we	11.	0 1

Well Driller 1

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STATE ENGINEER OFFICE



Mark Syla

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A' and Section 5 need be completed.

Section 1

			· ·	(A) Owner of well Post Street and Number Bo		<u>kg Co.</u>
				City	Pobbs	State New Mexico
				Well was drilled under P	ermit No. J- 30.	and is located in the Twp 17 5 Rge 33 E
		····		(B) Drilling Contractor Street and Number		License No. WD+103
				City	Lovington	State New Mexe
				Drilling was commenced.		Nov. 1 19 55
(P	lat of 64	0 acres)		Drilling was completed	·····	Nova 1 19 55

Section 2

PRINCIPAL WATER-BEARING STRATA

	No.	Depth i	in Feet To	Thickness in Feet	Description of Water	-Bearing Formation
-	1	186	198	3.2	Yater Jand	
	2					
	-3					
-	4					· · · · · · · · · · · · · · · · · · ·
-	5					

Section 3 RECORD OF CASING

Dia in.	Pounds	Threads	Depth		Feet	Type Shoe	Perforations	
	It.	in		1305 2008 ~	From	То		
7	10	10	0	210	210	done	160	210
	·	-						

Section 4

RECORD OF MUDDING AND CEMENTING

Methods Used	No. Sacks of	Tons	Diameter	Depth in Feet	
Methods Used	Clay Cement		Hole in in.	To	From
	· · · · · · · · · · · · · · · · · · ·	<u> </u>			
		·····			
	· · · ·				

Section 5

Plugging approved by:

PLUGGING RECORD

Name of Plugging Contractor		License	No
Street and Number	City	State	·
Tons of Clay used	Tons of Roughage used		ge
Plugging method used	Date	Plugged	19

	No.	Depth	of Plug	No. of Sacks Used	1
Basin Supervisor		From	To	NO. OF BACKS USED	
FOR USE OF STATE ENGINEER ONLY].
Date Received					
NCV 10 1955	L]
File No BO DIFICE	il	Le		17,33,3, 140	

LOG	OF	WELL
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	Section 6			LO	g of Well			. •
-	Depth From	in Feet To	Thickness in Feet	Color	Type	of Material Encoun	tered	
-	0	2	2	·	Rock & Soil	······································		ang en ge
	2	24	12		Rock		e 2 1	•
	34	20	6		Caliche		· 7.	
	20	180	160	· · · · · · · · · · · · · · · · · · ·	Sand & Rock	Shells	- <u></u>	<u> </u>
	160	186	. 6	·	look			
	186	198	12		Nator Sand	······································		
	196	210		<u> </u>	Sandy Clay		•	
	****	#+ 424 %	estan.		Partition and a statement of		,	
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-	The under	signed here	by certifies t	hat, to the best o	f his knowledge and bel	lief, the foregoin	g is a f	true and co
	rect record	i of the abov	ve described	well	· · · · · · · · · · · · · · · · · · ·	i		. •
					Aach	autor		
						Well Driller		
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Form WR-23

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STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

record, c Section I		ion IA and	d Section 5 nee					
	<u> </u>							-

	l	<u>.</u>						ew Mexico
	250							I is located in th
	250		l				. –	Rge. 33E
		1						nse No. WD-349
1		-						
	<u>`</u>		City	Herefo	rd		State	lexas
]								1968
Ĺ	l Plat of 640		Drilling	was comple	eted D	ecember 21		1968
			ci _1		1. 105	·		271
								tion 155
tate wr	letner we	en is snall	ow or artesian	UNALLO		Depth to wa	ter upon comple	tion 122
ection 2	3		PRI	NCIPAL WA	ATER-BEAR	ING STRATA		
No.		in Feet	Thickness in	1	De	scription of Water	-Bearing Formatic	
	From	То	Feet		· · ·			
1	150	212	62	Sandro	ck and	red fine s	land	-
-2	212	237	25	Clean	red en	nd		
3	237	239	2					
4								
5	239	265	26	Sand a		ll gravel		
<u> </u>		,		1		<u></u>	<u> </u>	
lection a	3			RECOR	D OF CA	SING		
Dia	Pounds	Threa	ids De	pth	Feet	Trmo Chao	Perfc	rations
in.	ft.	in	Top	Bottom	reei	Type Shoe	From	To
2-3/4	49.56	ە ھەشە	• <u>0</u> .	270	270	673 MJ 605	181	2227
·								
					 	<u> </u>		
ection 4			PECO					
		<u> n:</u>				ID CEMENTING	· · · · · · · · · · · · · · · · · · ·	
From	in Feet	Diame Hole in		No. Sa Cem			Methods Used	
				····			·	
				·····				
							· · · ·	•
						<u> </u>		······
	<u> </u>		I			·	<u> </u>	
ection 5				PLUGG	ING REC	ORD		
lame of	Pluggin	g Contrac	tor		1		Lizence No	•
								•
			10ns 01 1			Doto Di-	er or roughage	19
	approve				· · · · · · · · · · · · · · · · · · ·		ggeo s were placed as	
1982mg	approve	ч и ј,				· · ·		s 10110WS:
<u>.</u>	••	161 10 10-	Basin Su	pervisor	No	Depth of P	lug 'o No. of	Sacks Used
	۸	Construction of Construction of Construction		of the second				
	FORUS	E-OF ISTAT	ELENGINEER C	NLY				
n	ELIV-	o aggine	STATE EN					
Date 1	Seckided	刻 · 为] 】	Wo	· · · · · · · · · · · · · · · · · · ·				`
		11 (1) (1) (1) (1) (1) (1) (1) (1) (1) (101 5951					

File No. <u>L-3528-5-3</u> Use WATERFLOOD Location No. <u>17.33.3.14443</u> #2 Caprock 2-174-25

 \mathbf{V}_{i}

Depth i	n Fcet	Thickness		
From	То	in Feet	Color	Type of Material Encountered
0	6			Top Soil
6	30		· · · · · · · · · · · · · · · · · · ·	Rock, caliche and sand
_30	50		4	Sand, sandrock and calicha
50	88		<u></u>	Send and sandrock
88	90			Rock
90	150			Sand and sandrock
150	212			Sandrock and fine red sand
212	237			Clean red sand
237	239			Red clay and sand
239	265	Contract of Contract Property Film of	and the surface of th	Sand and small gravel
265	270			Red Bed
	-			1110 2
. *				L S Elev 4/8.3*
				Depth to KTrc4957 Elev of KTrc39.187
			-	
	· ·	· · · ·		Loc. No. 17.33.3. 14443
				Hydro: SurveyField Check
			· · · · · ·	Hydro, Surveyindo Oneco
		·····	· .	SOURCE OF ALTITUDE GIVEN
	t		· · · · · · · · · · · · · · · · · · ·	Interpolated from Topo. Sheet X
. .		· · · · ·		Determined by Inst. Leveling
				Other
	····			· ·

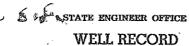
ı.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

WALCO DRILLING, INC. BY: duna U

R. Paul Coneway President

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Form WR-23

·····	(A) Owner of well Maljamar Co-op Representing Agreement
660 N of Siline	Street and Number 200 Booker Building
660 W of E. lime	City City State New Mexico
	Well was drilled under Permit No. 1,43528 and is located in the
W ter Lease W 99	4 SE4 of Section _ L Twp. 17 S Rge 33 E
	(B) Drilling Contractor Abboth Bross License No. WD-46
	Street and NumberBox_637
	City Key Mexico
0	Drilling was commenced December 11 1957
(Plat of 640 acres)	Drilling was completed
Elevation at top of casing in :	feet above sea level Total depth of well
	or artesianShallowDepth to water upon completion
Section 2	PRINCIPAL WATER-BEARING STRATA

Section	2		PRIN	CIPAL WATER-BEARING STRATA				
No.	Depth in Feet		Thickness in	Description of Water-Bearing Formation				
140.	From	То	Feet	Description of these Descript 20111ation				
1	160	225	65	Water Sand				
2								
33			-					
4				· · · ·				
5								

Section 3	l.			RECOR	D OF CAS	SING			
Dia	Pounds	Threads Depth			Feet	Type Shoe	Perforations		
in.	ft.	in	Top	Bottom		rate proc	From	To	
16			Ø	19	19				
0 3/4	36	welded	0	265	265	plain	170	232	
· · · · ·						199 THE TRUE	6 rows 1/	8"x12"	

12 ou, yds, grevel pack before pumping.

Section 4

Plugging approved by:

RECORD OF MUDDING AND CEMENTING

						•	
Depth	in Feet	Diameter	Tons	No. Sacks of		Methods Used	
From	То	Hole in in.	Clay	Cement		Wethous Used	
					······		
						· · · · · · · · · · · · · · · · · · ·	
		+ · · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	······································	
		+····-					
	1.	1			41		

Section 5	PLUGGING RECORD	-	
Name of Plugging Contractor.		License No.	
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used		
Plugging method used		Date Plugged	19

Cement Plugs were placed as follows:

7.1 T Basin Supervisor	No.	Depth From	of Plug To	- No. of Sacks Used		
FOR USE OF STATE ENGINEER ONLY	·					
Date Received DEC 30 1957 OFFICE CORCUMDIVATER SUPPOR						
File No L- 3528 Usclipuld abter food Logation No. 17.33. 4. 44322						
#1 MA1: 2-137-1			-	V		

P.

Section	6

106	OF	WELL
	U.	89 E.M.

Depth i	a Feet	Thickness		Type of Material Encountered
From	То	in Feet	Color	Type of mananal Encountered
0	1	1		Soll
1	23	20		Caliche
23.	2,50	129		Pack Sand
250	160	10		Hard Shell
160	225	<u>65</u>		Water Sand
225	24.0	15		Sandy Clay
240	265	25		Rod Bed
			-	4
]				
				L S Elev 4/197
:				Depth to KTrc_240r Elev of KTrc_3939
				,
			i i	F/ 17.33:4.44322
				17.33.4.44320
				Loc. No.
		· · · · · · · · · · · · · · · · · · ·		Hydro, SurveyField CheckX
		· · · · ·		Learness track of the second s
		·		
			. <u> </u>	POHDer on the second
	· •			SOURCE OF ALTIFICE GIVEN
				Polaces Itolii 1006, Sheet V
				Determined by Inst. Leveling Other
<u>.</u>				
<u> </u>				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

te Well Driller

- 1

1-3528

17.33.4.440

Form WR-23



WELL RECORD



1

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

	(A) Owner of well <u>Yucca satar Co.</u>	
	Street and Number 20, worth Nat. 11.	
	City <u>Ft. Jorah 2</u>	State <u>*0x38</u>
	Well was drilled under Permit No	and is located in the
		_Twp. <u>173</u> _Rge. <u>332</u>
	(B) Drilling Contractor Abbout Bros.	License No
	Street and Number Box 527	
	City Hobbs	StateNew Nex1co
	Drilling was commenced.	Juno 18 19.59
	Drilling was completed	June 25 19 59
(Plat of 640 acres)		

Section 2

PRINCIPAL WATER-BEARING STRATA

······································	Depth					Description of Water-Bearing Formation
140.	From	To	Feet	Scorpton of Whet Bearing Formation		
1	160	260	100	water and		
2						
3		1				
4	1					
5	[1				

Section 3	om 3 RECORD OF CASING							
Dia	Pounds ·	Threads	Depth		Feet	Type Shoe	Perf	orations
in.	ft.	in	Top	Bottom		rybe Suce	From	То
103/4	24	weld	0	272	272	open	165	260
			 				·····	
			1					

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	1. Clay	Clay Cement	Methods Used
				1	
					······································
		+			
		<u> </u>			
	I ·			1	

·	
Section	n

PLUGGING RECORD

Name of Plugging Contractor	License No,
Street and Number City_	State
Tons of Clay used	Type of roughage
Plugging method used	Date Plugged19
Plugging approved by:	Cement Plugs were placed as follows:

	No.	Depth	of Plug	No. of Sacks Used
Basin Supervisor	~101	From	То	Int. of Datks Ostal
FOR USE OF STATE ENGINEER ONLY			- ·	
Date Received FILED				
JUL 7 1959				
File No 2-35 98- GROUND WATERS OUS CONTINUES OF THE ROSWELL NEW MER OF	aa ₽¦	Rjen	cation No.	17.33.5.22.2.20
#1 MA1: 2-12	5.	2	-	an a

tion 6				
Depth i From	n Feet To	Thickness in Feet	Color	. Type of Material Encountered
)	1	1		3011
5	14	13		Ĝuliche
16	95	79		aand and gravel
> 5	160	65		tight send (hard)
160	260	100		water sund
260	272	12	9-21-27-27-27-27-27-27-27-27-27-27-27-27-27-	red clay
				4/981
	··· <u>-</u> ···	<u> </u>		LS Elev
	·			<u>4/1987</u> <u>L S Elev</u> <u>Depth to KTrc_2607</u> <u>Elev of KTrc39381</u>
				F. Contario 17.33.5.22220
				Loc. No
				Hydro, SurveyField CheckX
	<u> </u>	· · · · · · · · ·		SOURCE OF ALTITUDE GIVEN
	 	<u></u>		Interpolated from Topo. Sheet
				Determined by inst. Leveling
		· <u> </u>		Ólber
	ļ			
		<u> </u>		
		 		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller

A 12

L-3598-X

17.33.5.222

Form WR-23

rici n



STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1 Yucca Water Company (A) Owner of well 300 Park Avenue Street and Number____ New York 23 State No Y City _____ Well was drilled under Permit No. L-3598 and is located in the NW 14 NW 14 NW 14 of Section 6 Twp. 178 Rge. 33E (B) Drilling Contractor B. E. Greenwood License No. WD-115 Street and Number 215 Birdway Avenue El Paso, State Texas City Drilling was commenced June 18, 1962 19_____ Drilling was completed June 25, 1962 19___ 4997 (Plat of 640 acres)

Elevation at top of casing in feet above sea level **2800** Total depth of well **287 feet**. State whether well is shallow or artesian **shallow** Depth to water upon completion **210 Feet**

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in From	n Feet To	Thickness in Feet	Description of Water-Bearing Formation			
1	1. Láže	22Qx	20	Sandyxalayxandxanathuyrauat			
2	230	_255	25	Sand_with_streaks_of_clay			
3	255	2 60	5	Swallygraval Brown sand and clay - gray gravel			
4	265	27 0	5	Brown sand			
5	270	280	10	Brown small gravel and sandy clay			

RECORD OF CASING

Dia Pounds		Threads	Depth		Feet	Type Shoe	Perforations		
in.	ft.	in .	Top	Bottom		туре апое	From	То	
12-3/4	30	welded	2aex		287	welded	347 242	207 202	
		:				÷	242		

Section 4

Section 5

Plugging approved by:

Section 3

RECORD OF MUDDING AND CEMENTING

Depth in Fee				Methods Used
From To	Hole in in.	Clay	Cement	
	· · · · ·		-	

	PLUG

PLUGGING RECORD

Name of Plugging Contractor		License N	0
Street and Number	City	State	
Tons of Clay usedTons	of Roughage used	Type of roughage_	
Plugging method used		Plugged	19

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY				
12:0 13 21 707 2951 File No. 4-3598 Use 5 R (l	L	ocation No.	12, 33, 6, 111 Sr

LOG OF WELL

Depth in Feet		Thickness	d-1	Type of Material Encountered		
From	То	in Feet	Color	Type of Material Encountered		
0	20	20	Whito	Dolomito		
20	60	4 0	Brown	Calechi and sand		
60	. 220	160	Brown	Fine Sand		
220	A25 23) \$10	Brown	Clay		
230	255	25	Brown	Sand with Streaks of clay		
255	260	5	Gray	Gravel		
260 /	265	5	Brown	Clay		
265	270	5	Brown	Sand		
270	280	10	Brown	Small gravel and sandy clay		
280	285	son and the second s	Brown	Cley		
283	287	2	Purple	Clay		
-			· · · ·	•		
······		i	i	IS Fley 4242		
		·	······································	L S Elev <u>4/243</u> Depth to KTrc Elev of KTrc_ <u>3/23</u>		
				Elev of KTransa		
·						
	· · · · · · · · · · · · · · · · · · ·	······	······································	······································		
			·····	· · · · · · · · · · · · · · · · · · ·		
				10 22 / 1110		
				Loc. No. 17.33, 6, 11110		
,				Hydro. SurveyField ChockX		
i						
		····				
				SOURCE OF ALTITUDE AND		
	·			SOURCE OF ALTITUDE GIVEN		
				Interpolated from Topo. Sheet		
			· · · · · · · · · · · · · · · · · · ·	eventimeted by last levaling		
			· · ·	Other -1/acccrs 3'e p +.		
			<u> </u>			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

Well Driller

B. E. Greenwood

1-3598

I

17.33.6.111

Form WR-23 FIELD ENGR. LOG

1.1

STATE ENGINEER OFFICE WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section	1
Dection	T

好。 54 F4BC的基本	
(A) Owner of well B. E. Paschall Street and Number. 605 S. II. 20 St.	
City State	**
Well was drilled under Permit Noah	
)1_ <u>R</u>
(B) Drilling Contractor p to 2 Brilling Bo, License No. MD-	8 <u>1</u>
Street and Number	
City City State State	¢
Drilling was commenced sopt 25	60
(Plat of 640 acres) Drilling was completed	60

Section	2		PRINCIPA	L WATER-BEARING STRATA				
No.	Depth	in Feet	Thickness in Feet	Description of Water-Bearing Formation				
			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
2	-							
3		<u> </u>						
4		· .						
5								

lection :	3			RECOR	D OF CA	SING			
Dia	Pounds	Threads	Threads Depth		Feet	-	Perforations		
in.	ft.	in	Тор	Bottom	reet	Type Shoe	From	To	
	<u> </u>	1							
				zone			• •		
		· · · · · · · · · · · · · · · · · · ·					· · · · ·		

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	Clay	Cement	Methods Used
		7			
		· · ·			

Section 5

PLUGGING RECORD

Name of Plugging Contractor	·····	License	No
Street and Number	City	State	· · · · · · · · · · · · · · · · · · ·
Tons of Clay usedTons of	Roughage used		ge
Plugging method used	Date	Plugged	

Plugging approved by:

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE BEGINER ONLY				·····
Date Received				
File No. <u>1-1524</u> Use <u>Dom</u> .			ocation No	. 17. 3.3. 6. 440

ection 6		<u></u>	OF WELL	
Depth i		Thickness	Color	Type of Material Encountered
From	То	in Feet		
			<u> </u>	
			•	
				This was a cluan out jub from 75 ft. to IOO ft. on a domastic well, fo
				Stork vatoring only .
		<u> </u>	·	
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			<u></u>	
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				u
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			· · ·	
				· · · · · · · · · · · · · · · · · · ·

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Otis H. Prince

Form WR-23 LOG

STATE ENGINEER OFFICE



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WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

... _

Section 1

	(A) Owner of well Duel Drilling Coj c/6 S. O. Lawb
	City Colorado City State Texas
	Well was drilled under Permit Noand is located in the near center ¹⁴ - <u>NE</u> -14 of Section 7Twp. <u>17</u> S. Rge. <u>338</u>
	(B) Drilling Contractor p & p. Drilling Co. License No. WD-281
	Street and Number
	City State New Mexico
	Drilling was commenced Nev I 19_59
L	Drilling was completed May 3
(Plat of 640 acres)	

Elevation at top of casing in feet above sea level Total depth of well 219 ft. State whether well is shallow or artesian ______Shallow Depth to water upon completion 211 ft

Section 2

PRINCIPAL WATER-BEARING STRATA

Nó.	Depth in Feet		Thickness in	Description of Water-Bearing Formation				
	From	To	Feet					
1	211	21,0	·					
2								
3								
4								
5	1							

RECORD OF CASING Section 3 Depth Perforations Dia Pounds ... Threads Feet Type Shoe in. ft. in. Top Bottom From To None

Section 4

RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Diameter Hole in in,	Tons Clay	No. Sacks of Cement	Methods Used
	· · · · · · · · · · · · · · · · · · ·	7		None	
<u> </u>				· · ·	
-	i				

Section 5	PLUGGING RECORD)	
Name of Plugging Contractor.	· · · · · · · · · · · · · · · · · · ·	License	No
Street and Number		State	
Tons of Clay used		Type of roughag	e
Plugging method used		Date Plugged	
Plugging approved by:		Cement Plugs were placed	i as follows:

	The star (free sound - re	No.		of Plug	No. of Sacks Used
	Basin Supervisor	ļ	From	To	
FOR USE OF	STATE ENGINEER ON A			- <u>-</u> -	
Date Received			3.1		
	JUN 24 1959			· · · ·	
	OFFICE	Loovenneere		********	anna ann an Air an Air ann an Air
,	GROUND WATER SUPPOVISION	~		,	45 5 5 5 5 st
File No. 2-4/22	L ROSWELL, NEW INC. Use OI 2		Lo	eation No.	17.33.7.32322

Section 6

_	Depth in Feet		Thickness				
	From	То	in Feet	Color	Type of Material Encountered		
_	0	Ť		·			
	Î	4	1.6		Rank		
_	4	25			Glichis		
	25	75	· · · · · · · · · · · · · · · · · · ·		Sandy Clay		
-	75	140			Dry Sand		
_	I)O	194			Sandy Clay		
	I94	274			Water Send		
	214	230			Sandy Clay		
•	230	2.4L		· · · · · · · · · · · · · · · · · · ·	Band		
-	244	2111	10.00 YOR CAPPOINT		Sand & Gravel		
	217	2119			Red Bed		
			·· .				
·	· ·			·····	42291		
_			· · ·	······································			
			1. 194		Depth to K Trc 2.47/h Elev of K Trc 3.9825		
<u> </u>			and the second sec				
`` _* —				· · · · · · · · · · · · · · · · · · ·			
. ·	·						
		5		· ·	Loc. No. 17. 33. 7. 32.322		
_			1 N N		Hydro. SurveyField Check		
—							
					<u></u>		
					SOURCE OF ALTITUDE GIVEN		
					Interpolated from Topo. Sheet X		
,—		· · · ·	·		Determined by Inst, Leveling		
-							
		1		_			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller

1-4/22

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17.33.7.320



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Un st	j U

STATE ENGINEER OFFICE

WELL		

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

	4					
- C –	-	· •	5.000	-	1	
Se	٩.	ъ.	10	E£ .	T.	

Form WR-23

			· · · ·	A) Owner of well KENAMES OLL CAMPANY
	:			Street and Number Ban 124
				City HALJAHAH Well was drilled under Permit No. AUMER DEL UNC. AND AUMER DEL UNC. AND AUMER DEL UNC. AND AUMER DEL UNC.
			· ·	Well was drilled under Permit No.
		l .		C 14 SE 14 4 of Section 7 Twp. 173 Rge, 335
				(B) Drilling Contractor. C. ALDREDGE License No. 79
				Street and Number Box 379
-	:	1		City Lavi Nava State New HERI to
	•			Drilling was commenced June 28 19 55
		<u> </u>]	Drilling was completed JULY 13 19.35

(Plat of 640 acres)

Section 2	2
-----------	---

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet	Thickness in Feet	Description of Water-Bearing Formation
1	164 188	24	LIGHT WATER SAND
2	100 215	27	ROOD WATEN SAND AND BRAVEL
. 3			
- 4			
5		l	

ection 3)	<i>i</i> .	2	RECOR	D OF CA	SING		· · · · ·
Dia	Pounds	Threads	Dej	oth -	Feet	Type Shoe	Perfe	orations
in.	ft.	in	Top	Bottom	. 4666	Type once	From	To
10	32		0	217	217	转命检查	183	217
	$(1, \dots, k)$			1.				
			- V - 2	. :				
					:			

Section 4

RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	Clay	Cement	
	3.4	124	م		8 SAURE OF AQUEGEL POURED IN TOP OF
:- ·		1	. 24 1	•	HOLE TO HOLD BACK QUICKBAND WHILE
÷.		1 ×		. 7	CRILLING WELL
		·	· · ······		

Section 5	1	 PLUGGING RECORD	

Name of Plugging Con	tractor		<u> </u>	License N	Го
Street and Number		c	ity	State	· · · · · · · · · · · · · · · · · · ·
Tons of Clay used	Tons c	f Roughage used	L	pe of roughage	;
Plugging method used			Date Pl	ugged	

Cement Plugs were placed as follows:

Plugging approved by:

·

- 11	<u> </u>			No.		of Plug	No. of Sacks Us	ed
	2	Basin Supervisor		-	From	То		
	FOR USE OF	STATE ENGINEER ONLY						
Date	Received	JUL 28 1955	Handware			}		
	t i sa	OFFICE				<u> </u>	·	
11222000000000000000000000000000000000	1	GROUND WATER SUPERVISOR BOSWELL, NEW MEXICO						
File No),	0(277/Use	Ma	ini	ċL	ocation No	17 33 7	<i>4000</i>

Section 6		-		DF WELL
		<u></u>		
Depth i	n Feet To	Thickness in Feet	Color	Type of Material Encountered
0	4	4	WHATE	Top Reck
4	12	8	Rep	SAND
12	17	f.	WHITE	HARD ROCK
17	51	34	Red	SAND
x982 51	64	13	GRAY	GALICHE
64	104	40	Red	SAND
104	117	13	GRAY	HARD CALICHE
117	134	17	GRAY	L ME AND STREAKS OF SAND
134	149	15	GRAY	BROKEN LIME
149	165	6	Bezu Red	SAND
155	164	9	GRAY	BROKEN LINE
164	198	24	Rso	SAND - LIGHT WATER SAND
188	189	1	GRAY	LINE SHELL
189	215	26	BROWN	SAND AND GRAVEL - GOOD WATER SAND
215	220	5	Reo	SANDY UHALE
220	2221	2	RED	PACK SAND
222	227	5	RED	SHALE
	· · · ·			
	SET 1)" PIPE /	T 217 2 PEE	T INTO RED SANDY SHALE
,		TAL DEPTH		
				L S Elev 4217
				Depth to KTrc2227 Elev of KTrc2737
		-		
	`			19017.33.7.40000
	· · ·			Loc. No
		- <u>-</u> .		Hydro. SurveyField CheckX
	2			
·				

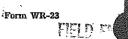
The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

1-277

Well Driller . 2

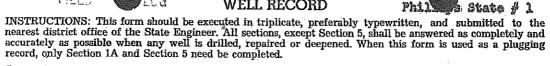
17.33.7.400

SOURCE OF ALTITUDE GIVEN Interpolated from Topo. Sheat X Determined by Inst. Leveling Other



STATE ENGINEER OFFICE

WELL RECORD



Section 1

ĩ		· · · · · ·	(A) Owner of well	Thunderbird Dri	111ng Go	
			Street and Number 32	2 Fidelity Union	Bldg.	
Į			City	Dallas	StateText	18
			Well was drilled under	Permit No	and is lo	cated in the
			<u> </u>	¼ of Section		ze.33_1
Ì		1	(B) Drilling Contracto	r Abbatt Bros.	License No	. WD-46
			Street and Number	Box 637		•
		••• <mark>•••••••</mark>	City		State Now A	lexico
			Drilling was commence	ed	Dec. 19	1957
		<u>_</u>	Drilling was completed		Dec. 21	19 57
	(Plat of 640 acres	1 .				

Elevation at top of casing in feet above sea level____ 230 State whether well is shallow or artesian Shallow Depth to water upon completion 160

. Section 2 PRINCIPAL WATER-BEARING STRATA

<u>ng</u>

No.	Depth in Feet		Thickness in	Description of Water-Bearing Formation					
	From	To	Feet						
1	160	230	70	Water Sand					
2									
3			-						
4			-						
5									

Section 3				RECOR	D OF CAS	SING		•	
Dia	Pounds	Threads Dep		epth Feet		Type Shoe	Perforations		
in.	ft.	in	Тор	Bottom	reci	TAhe pune -	From	To	
						·			
	,								

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter	Tons	No. Sacks of				
From	То	Hole in in.	ole in in. Clay Cement		1VLe	Methods Used		
						······	×	
					٠.		· ·	
	· · · · · · · · · · · · · · · · · · ·			1	÷	······································		
		┟╸╴╴╴╸╸┝						

\mathbf{S}	ect	ion	E,
S	ect	ion	Ę

PLUGGING RECORD

Name of Plugging Contractor_		License	No
Street and Number	City	State	
Tons of Clay used		Type of rougha	ge
	-		-

Plugging approved by:

Date Plugged 19

	Cement	Plugs	were	placed	\mathbf{as}	follows:
--	--------	-------	------	--------	---------------	----------

1 Basin Supervisor	No,	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY DEC 3 0 1957 Date Received GROUND WAISS SUMERVISOR RESEARCH AND			-	
File No. <u>2-3749</u> Use 0.20	<u>. D</u>		ecation No.	17.23.9.330 .342113

Contion	c

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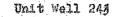
a construction of the second second

÷

Depth From		Thickness in Feet	Color	Type of Material Encountered
	То			
0	<u> </u>	1		Soil
	19.	18	· · · ·	Galiohe
19	160	141	·	Dry Sand
160_	230	70		Vator Sand
		· · · ·		
			· · · · · · · · · · · · · · · · · · ·	
				· · · · · · · · · · · · · · · · · · ·
			·····	
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	•			· · · · · · · · · · · · · · · · · · ·
			· · · · ·	
			•	
he unders	signed hereb	ov certifies the	at, to the best of h	is knowledge and belief, the foregoing is a true and con
ect record	of the abov	e described w	ell.	1
				Denle Child
			· · · · · · ·	Well Driller
	-			• • •
•				
• • •				
· · ·	• • •			
· · ·	• • •			
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				• • • • • • • • • • • • • • • • • • • •
	··· ·	:		
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Form WR-23 FIELD ENGR. LOG

STATE ENGINEER OFFICE



INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

~ .	-
Section	

		······································	(A) Owner of well Continental 611 Consent
			Street and Number 2.0. Box 460 City Robbs State New Mexico
			Well was drilled under Permit No.20052805-2 and is located in the NX 14 SV 14 of Section 6 Twp. 179 Rge. 33E
			(B) Drilling Contractor Abbot Brothers License No. WD-46 Street and Number F.0. Box
•	<u>.</u>	· · · · · ·	City Robbs, State New Mexico
	_		Drilling was commenced 7:05:067 19 Drilling was completed 7:019:067 19

(Plat of 640 acres)

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth From	in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	198	263	641	Sand
2				
3		-	s iver a	
4				
, <u>5</u>	1	·	·	

Section 3 RECORD OF CASING

	Dia	Pounds	Threads	Dej	oth	Feet	Type Shoe	Perfor	ations
	in.	ft.	in	Тор	Bottom	reel	TAbe Bune	From	То
12	5/4	36	welded	<u>ر</u> س	262	263	open	170	. 250
				1. 1					
-		· -	•			· · · ·		4 rows 3/16	X 12
	-			÷		4			

Section 4

15

Section 5

- 1-

RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	 Method's Used	
<i>,</i> `						
:	,					
	1					

PLUGGING RECORD

Name of Plugging Contractor	<u> </u>	License No.
Street and Number	City	State
Tons of Clay usedTons of Roughage	usedType of	roughage
Plugging method used	Date Plugged	
Plugging approved by:	Cement Plugs we	re placed as follows:

Basin Supervisor	No.	Depth From	of Plug To	- No. of	Sacks Used
FOR USE OF STATE ENGINEER ONLY					· · · · · · · · · · · · · · · · · · ·
Date Addenved 81.100 /act					
~~U					7-9-9-1-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-10-2-5-
File No. L-3528-5-2 Use SK	зÇ	prrect. La	ed ocation No	17.33.9	<u>7.33/432''</u>

Section 6

LOG OF WELL

From			Calor	Three of Material Transmission 3
	То	in Feet	Color	Type of Material Encountered
O	1			surface soil
	- 26	25		oelicho
- 26	78	52		send, tight
	- 95	3.8		sand, loose
6	129		· · · · · · · · · · · · · · · · · · ·	send, tight
129	232	103		aend
_232	252	20	- -	Bandy clay
252	262	10	i TAL	olay
	and the second second			
		· 1		4200
				L'S LIOV
			· · · · · · · · · · · · · · · · · · ·	Elev of KTrc <u>3.94875</u>
				SP 17.33.9.3.31432
••••••			·····	
		• <u>·</u>	<u></u>	Loc: No
	4		<u> </u>	Hydro, SurveyFisht CheckX
		· · · · · · · · · · · · · · · · · · ·		
· · ·		<u> </u>		
				······································
				PAUDAE of the
: .				SOURCE OF ALTIFUDE GIVEN
				Interpolated from Topo Shost
		· · · · · ·		Determined by Inst. Leveling
:			······································	
<u> </u>				······
		<u></u>		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller

1-3528-5-2

17.33.9.331

м - с э Ми -		h		х не *				Ravis-	d tune re
			STA	TE ENCINEE	OFFICE		U .	Revise	a June 19
During Gentrator Albo St. Section 3. RECORD OF CASING Section 4. RECORD OF CASING Section 5. RECORD OF CASING									
			Section 1				g a waxayor 🥠		
(A) Owner of	Idea	l Basic					Americ	я	# 8
Street or	Post Office A	ddress P.O.	Box 31			oompany0wher	'sWell No.	<u></u>	<u>πο</u>
City and	State <u>Car</u>	lsbad, N	ew Mexi	<u>co 882</u>	20		*******		
Well was drilled	under Permi	t No. L-188	0 <u>S-</u> 3		. and is located	in the:		•	
a	_ % <u>_NW_</u> !	4_ <u>SE</u> ¼_]	NW ¼ of Se	ction <u>12</u>	Township	175 Ran	_e <u>33</u> E	}	N.M.P
b. Tract i	No	of Map No.		of the			-		
C. Lot Ni Subdiv	ision, recorde	d in	Lea	or the	ounty.				
d. X=		fcet, Y=		feet. N.	M: Coordinate	System			Zone
the						,			Gra
B) Drilling C	ontractor	Abbott	Bros, D	rilling		License No	D-46		
AddressHo	obbs, Ne	w Mexico		0					
									٦
Elevation of lan	d surface or			at well	l is	ft. Total depth o	of well 2	68	;
Completed well	is 🛣 s	hallow 🗀 a	rtesian.		Depth to water	upon completion	of well 1	<u>55</u>	*
		Sect	tion 2, PRIN	CIPAL WATER	BEARING ST	RATA			
		T							
			I	Description of V	Vater-Bearing F	ormation			
From	To		1	Description of V	Vater-Bearing F	ormation			
From	To	in Feet		_	Vater-Bearing F	formation			
From	To	in Feet		_	Vater-Bearing F	ormation			
From	To	in Feet		_	Vater-Bearing F	ormation			
From	To	in Feet		_	Vater-Bearing F	ormation			
From	To	in Feet	Sa	nd		ormation			
From 159	To 230	in Feet 71	Sa	nd n 3. RECORD (OF CASING		(gallons	per m	inute)
From 159 Diameter	To 230 Pounds	in Feet 71 Threads	Section	nd n 3. RECORD a in Feet	DF CASING Length		(gallons	Perfora	inute)
From 159 Diameter (inches)	To 230 Pounds per foot	Threads per in.	Sa: Section Depth Top	nd n 3. RECORD : in Feet Bottom	DF CASING Length (feet)		(gallons	Perfora m	tions To
From 159 Diameter (inches)	To 230 Pounds per foot	Threads per in.	Sa: Section Depth Top	nd n 3. RECORD : in Feet Bottom	DF CASING Length (feet)		(gallons	Perfora m	tions To
From 159 Diameter (inches)	To 230 Pounds per foot	Threads per in.	Sa: Section Depth Top	nd n 3. RECORD : in Feet Bottom	DF CASING Length (feet)		(gallons	Perfora m	tions To
From 159 Diameter (inches)	To 230 Pounds per foot	Threads per in.	Sa: Section Depth Top	nd n 3. RECORD : in Feet Bottom	DF CASING Length (feet)		(gallons	Perfora m	tions To
From 159 Diameter (inches) 14	To 230 Pounds per foot 36,71	in Feet 71 Threads per in. Welded Sectio	Section Depth Top O	nd n 3. RECORD (in Feet Bottom 269 RD OF MUDDI	DF CASING Length (feet) 269 NG AND CEM	Type of Shoe	(gallons	Perfora m	tions To
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet	Type of Shoe	(gallons	Perfora m 3 5	tions To
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71	in Feet 71 Threads per in. Welded Section Hole	Section Depth Top O M 4. RECOF Sack of Mu	nd n 3. RECORD 1 in Feet Bottom 269 RD OF MUDDI s Cu of	DF CASING Length (feet) 269 NG AND CEM bic Feet Cement	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i	To 230 Pounds per foot 36.71 n Feet To	in Feet 71 71 Threads per in. Welded Section Hole Diameter	Section Depth Top O M 4. RECOF Sack of Mu	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu	DF CASING Length (feet) 269 NG AND CEM bic Feet Cement	Type of Shoe	(gallons	Perfora m 3 5	tions To 268
From 159 Diameter (inches) 14 Depth i From Hugging Contra Address	To 230 Pounds per foot 36.71 n Feet To	in Feet 71 71 Threads per in. Welded Section Hole Diameter	Section Depth Top O M 4. RECOF Sack of Mu	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu of a 5. PLUGGINA	DF CASING Length (feet) 269 NG AND CEM bic Feet Cement	Type of Shoe	(gallons	Perfora m 5 	tions To 268
From 159 Diameter (inches) 14 Depth i From Hugging Contra	To 230 230 Pounds per foot 36.71 n Feet To ctor 1	in Feet 71 71 Threads per in. Welded Section Hole Diameter	Section Depth Top O O Sack of Mu Sack	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu of a 5. PLUGGINA	DF CASING Length (feet) 269 NG AND CEM bic Feet Cement 3-RECORD	Type of Shoe	(gallons	Perfora m 5 	tions To 268
From 159 Diameter (inches) 14 Depth i From lugging Contra Address lugging Method	To 230 230 Pounds per foot 36.71 n Feet To ctor d	in Feet 71 71 Threads per in. Welded Section Hole Diameter	Section Depth Top O O Sack of Mu Sack	nd n 3. RECORD a in Feet Bottom 269 RD OF MUDDI s Cu of a 5. PLUGGINA	DF CASING Length (feet) 269 NG AND CEM bic Feet Cement 3-RECORD	Type of Shoe	(gallons	Perfora m 5 	tions To 268

		nay 14, 1301	Quad	FWL	FSL	-
/	🍯 File No	L-1880-S-3	Use _IND <i>MOO</i>	Location No. 17.3	3.12. 14142 . <i>1414C</i>	, •
	-					

 \sim

	Material Encountered	Color and T	Thickness in Feet		Depth in
		Soil	1		• From
		Caliche		26	1
			 99	125	26
		Sand and sand rock		159	125
		Sand-water	71	230	159
<u></u>		Sand	11	241	230
	/	Sand and clay stre	17	258	241
		Red clay	10	268	258
	8 	L S Elev Depth to KTrc. Elev of KTrc.			
		Loc. No. <u>17. 33.12.</u> Hydro, SurveyFi		•	
		SOURCE OF ALTITUD		} 	
		Interpolated from Topo. She			
·· · ·· · ·· · ··		Determined by Inst. Levelir Other			
				<u> </u>	<u>+</u>
		· · · · · · · · · · · · · · · · · · ·	· 	· .	
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		· · ·		<u>`````````````````````````````````````</u>	
	DRMATION	1 7. REMARKS AND ADDITIONA	Sectio		
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MAY 14	ATE A	_ . .			
8	·	<u>.</u>		-	

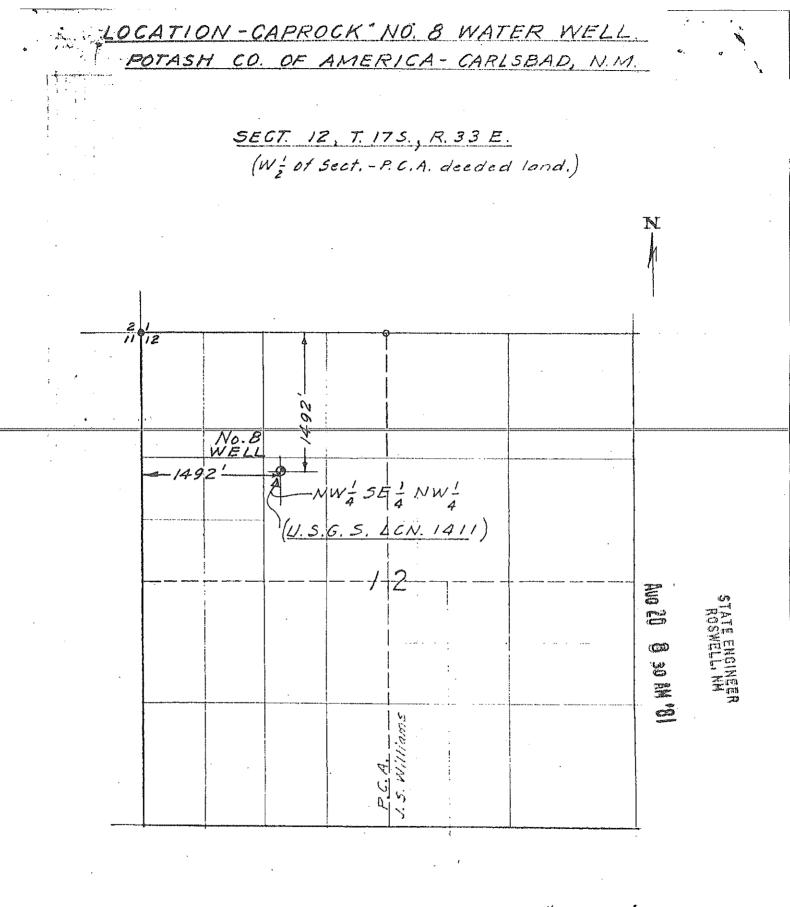
The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell ale 34.B

INSTRUCTIONS: This of the State Engineer.

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should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office ctions, except Section 5, shall be answered as completely and accurate is possible when any well is 1. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.



1"=1000'

1-1880-5-3 .14110



Form WR-23

FIELD ENGR. LOG

STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

							h Company Box 21		
			0	areet and	ristad	<u></u>			ate New Nextoo
			L	ity				Sta	1 TOGA MANA
			V	Vell was	drilled un	der Pern	ait No. way out	9 999799 9 _	and is located in
				<u>></u> E_14	<u></u> 1⁄4	jaj	4 of Section	⊈Twp	17 5 Rge. 33 4
			²⁷⁹ (B) Drill	ing Contra	etor	ADDOUG EFO	8 <u>6</u> 207	License No. 🕬 🤞
	10011		$\sum_{x \in Y} \mathbf{s}$	treet and	l Number.	\$	°., C., Box Ø	37	
	100 /	, 522, 522		lity	Hobl			Sta	ate New Kextoo
Ó	100	1	I	Drilling v	vas comm	enced	Hay 2	 	<u>19</u>
			I	Drilling w	as comple	eted	May 5		19 00
•	Plat of 640 a								. 239
						10	Total de	pth of well	A
tate wł	nether wel	l is shall	ow or	artesian	10. 1 D CO 42 Ak 19	e ave	Depth to wa	ter upon c	ompletion ****
ection 2	2			PRIN	ICIPAL WA	TER-BEAR	ING STRATA		
1	Depth in	n Feet	Thiel	kness in		De	scription of Wate	r_Bearing Fo	rmation
No.	From	То	· J	Feet		200	,	-Dowing ro	
1	115	230	1	15	Wat	or our	vđ		
2					<u> </u>				·····
	295	250		15	agn I	K2 (67K3	gravel		
3									
4							<u></u>		·
5			l		<u> </u>				
ection	2				RECOR	D OF CA	SING		
	1		1-	De	pth	<u> </u>		1	Perforations
Dia in.	Pounds ft.	Threa		Top	Bottom	Feet	Type Shoe	From	i j To
14	83	401	¢ i	0	259	259	open	120	240
Dr.	41166 2	"a" hol	6		· · · ·	· · · · ·			
			·		·				······
	<u> </u>	!	'		<u> </u>	·		<u>.</u>	,, _,, _
ection (4			RECOR	D OF MUD	DDING AN	ID CEMENTING		<u></u>
Deptl	h in Feet	Diamo		Tons	No. Sa			Methods	Used
From	То	Hole h	1 în.	Clay	Cerr	hent	- 44)	· • •	······
	· · · ·		:						
	ļ						<i>K</i>		- -
	1				[<u> </u>			·
	-			· · _	BUCC				
ection I						SING REC		.	
ame of	f Plugging	; Contrac	tor					Licen	nse No
									•
									hage
ugging	g method ı	ised							
lugging	g approved	l by:					Cement Plu	gs were pla	aced as follows:
						N	Depth of F		No. of Sacks Used
				Basin Suj			From	ro	
CHICA INCOMENTS	FOR US	OF STA	情怨的	FINEER C	NLY	#1			<u>.</u>
		II IJINI	SIO		1	IN FEEDERAL PROVIDENCE			
						8			
Date	Received		1 <u>7</u> . EV	AT8	<u>_V</u>				
Date	Received			120	_ <u>V</u>				

	1. 1 . 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	21 전기			
Section 6			LOG	OF WELL	
Depth i From	n Feet To	Thickness in Feet	Color	Type of Material Encountered	
0	2	1		5012	
	23	22		Collehe	
23	70	47		send	
20	115	6 5		Sand, dry	
115	230	235		Sand, water	
- 280	235			Sandy olay	
239	250	25		Sand and gravel Olay	
250	259	Ø	rec	010y	
				L S Elev 113 2 r	
}			-	Depth to KIrc_250r Elev of KIrc_3883r	
				LICY Of Carrier I Commence	
					<u></u>
-			·	17.33.12, 33.44N/	
			·····	Loc. No. 17.33, 12. 33 4441 Hydro-SurveyField Check_X	
	•			Hydro. SurveyField_Check	<u>.</u>
······································					
			· · · · · · · · · · · · · · · · · · ·	SOURCE OF ALTITUDE GIVEN	
				Interpolated from Topo. Shoot	
				Determined by Inst. Leveling	,
				Other	
		·	<u> </u>	· · · · · · · · · · · · · · · · · · ·	
		· · · · · · · · · · · · · · · · · · ·			
		····			
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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Mull U Well Driller 1660 Marr

17.33.12.334

1-1880 Three 1884 ComB. S

Form WR-23



STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

()	Street and Number Boanelly, Brilling Sena	
	City Sex 433	State
	Well was driffed under Permit No.	and is located in the
	(B) Drilling Contractor	/pRge
	(B) Duillier Contractor	License No 33%
	Street and Number.	
	City 802 300	
	Drilling was confimenced	how Kendag
	Drilling was completed Decomber in	19 <mark>59</mark>
(Plat of 640 acres)	Devenber a	59

Depth to water upon completion State whether well is shallow or artesian 105

PRINCIPAL WATER-BEARING STRATA Section 2

No.	Depth i	in Feét To	Thickness in Feet	Description of Water-Bearing Formation
1				
2	165	202	37	Nature Sand
3	· · · · · · ·			
4			· · · · · · · · · · · · · · · · · · ·	
5				

ection 3	3			RECOR	D OF CASI	NG		-	
Dia	Pounds	Threads	Depth		734	Type Shoe	Perforations .		
in.	ft.	in	Тор	Bottom	Feet	Type Shoe	From	То	
17	20	30	Ø	198	198	Cons	277	290	
-							<u>* .</u>		
			l						

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Fe From 1	et 'o	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
				· · · ·	
					· · · · · · · · · · · · · · · · · · ·
		· ·			<u> </u>

Section	

PLUGGING RECORD

Name of Plugging Contractor.		License	No
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used	Type of roughag	(e
Plugging method used		Date Plugged	19
Plugging approved by:		Cement Plugs were placed	

Cement Plugs were placed as follows:

	No	No. Depth of Plug		No. of Sacks Used
Basin Supervisor	1.0.	From	То	No. of Datas Oscu
				· · ·
FOR USE OF STATE ENGINEER ONLY	<u> </u>			
II LOINISIO 🔨	Į	[
Date Received				
1023 DEC 10 VH 8: 21	L	·		
l Dem				
File No. 1-4333 Use 0.20.1	7.	Ŀc	eation No. /	17.33 13.110
3 File No. 2 70000				

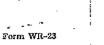
Section 6

LOG OF WELL

Section 0			LOG	JF WELL		
Depth in Feet		Thickness				
From	To	in Feet	Color	Type of Material Encountered		
_ 0	14	24		Galiche		
24	68	54				
68	83	2.5				
83	140	57		Sand (loose)		
.40	165	25		Sand (tight)		
.65	202			Sand (loose)		
		37		Sand (water)		
262	217	15				
		· · ·				
. <u> </u>		1	·	· · ·		
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			-			
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<u>. </u>		++		······································		
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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

<u>Colword</u> K Well Driller Junk



STATE ENGINEER OFFICE

WELL RECORD

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1	-,		(A) Owne	r of well	Potest	Company	of America	:
	1					1		
			ou. Car	lsbad.	N.M.	- 1	State	
-				duillod ur	don Permi	+ No 188		d is located in the
			TICLL Was	առուս ա	TOTOL POINT	10 A104		<u>5 Rge. 33E</u>
			(72) 72-111	74	noton Ahł	ott Bros	Lice	nse NoWD-46
	· 144						A.,	
								· · · · · · · · · · · · · · · · · · ·
			City	HODDS,	¥_,2%,	Taroh: 0	1972	10
			Drilling w	as comm	enced	<u>taron 79</u>	+ Z.I.F	10
(P)	lat of 640 ac1	<u> </u>	Drilling w			aren 10.,	19.1.2	
			t ahove sea	level	• • •		lepth of well2	35
sievation	at top of t	a aballow o	r artesian	shal	low	Depth to w	ater upon compl	etion151
nate wite	etuer wen	IS SHALLOW U						
ection 2			PRIN	CIPAL WA	ATER-BEARI	NG STRATA		<u> </u>
No.	Depth in I	Feet Thi	ckness in	1	Des	cription of Wa	ter-Bearing Formati	on .
190.	From	То	Feet					
1	:		2010/07					
2						ing at the second		
3							- 24	-)
4				·····		·····		
			<u> </u>					
5	<u> </u>		I					· · · · · · · · · · · · · · · · · · ·
Section 3				RECO	ND OF CAS	INĠ	· ·	···
Dia	Pounds	Threads	Der	Depth Feet Type Shoe Perform				
in.	ft.	in	Top	Bottom	Leet	Type Suce	From	To
14	30	welded	1	238	238	none	118	228
·						1.44 1.44		
		,						-
		<u></u>		- ·				
Section 4	1		RECOR	D OF MU	DDING AN	D CEMENTING	9	
Depth From	in Feet	Diameter Hole-in in.	Tons Clay		nent		Methods Used	-
		: 1				•	· . ·	5
		¥			· · · · · · · · · · · · · · · · · · ·			
	· · · · ·	<u> </u>						
	3	l						
lection 5				PLUG	Sing Reco	ORD	•	· · ·
		Contractor					License N	0
troot an	d Number	•			City		State	
	-	eđ						
							ugs were placed a	
nugging	approved	vy.			· · ·	<u> </u>		
		χ	Basin Sup	ervisor	No.	Depth of From	To No.	of Sacks Used
<u></u>		OF, STATE E	IGINEER O	NLY	NULL IN CONTRACT			
		ປະເອັດການ ແ ເພີ້ມ ແລະເຮ			Swellisburg			-
Data I		5-6 3- 	• •					
i Duic J		C 7 N3 1	C , Sala 777	qf .				5.e
l					77-William	<u></u>	E	
1					3 ALEGE CARACTER			
File No.	L-1880	-5-2		_Use_C	OM .	Locat	tion No. 17.33	13, 3141.3
111 111								

and the second

	•	· ·		
Section 6	<u> </u>		LOG	OF WELL
Depth From	in Feet To	Thickness in Feet	Color	Type of Material Encountered
0.	. 4		brown	surface soil
4	28	24	gray	caliche
-28	45	13	brown	snad tight
45	102 ·	- 57	brown	sand loose
102	153	51	brown	sand tight
153.	154	1	red	shale
154	198	44	brown	sand
198	201	.3	red	shale
201	218	17	brown	sand
218	225		brown	sandy clay
225	230	5	gray	gravel
230	235	5	red	clay
•				
				1101
			·	L S Eley
				Elev of KTrc3894
1 · ·	۰۱ ,			<u> </u>
				Loc. No. 17.33.13. 31413
			· · ·	Hydro. SurveyField Check HurP
	· · · · · ·	5		
	-			SOURCE OF ALTITUDE GIVEN
<u> </u>				Interpolated from Topo. Sheet <u>4124</u>
		•	·	Determined by Inst. Leveling
	_			Other
•				······································
	-			
	5 . Z	-		

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Gruncel Cubbatt Well Driller

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STATE ENGINEER OFFICE



State New Mexico

and is located in the

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A' and Section 5 need be completed.

Section 1	1	<u>.</u>	(A) Owner of well Potash Co	opany of Am	orica
		ļ	Street and Number City Carlsbad		State
			Well was drilled under Permit No. SW 14 SE 14 SW 4 of Se	L=1880 ction 13 Tw	

			SW 14 SE 14 SW 14 of Section 13	Twp. 17 9	_Rge. 33 E
		·	(B) Drilling Contractor Caybon & Porter	License	NoWD-183
 í			Street and Number Box 1021	· · · · · · · · · · · · · · · · · · ·	
 	l		City Lovington	State New	Mexico
i			Drilling was commenced	August 14	1955
1			Drilling was completed	August 18	1955

(Plat of 640 acres)

Plugging approved by:

Elevation at top of casing in feet above sea level______Total depth of well 245______ State whether well is shallow or artesian Shallow Depth to water upon completion______

Section 2

PRINCIPAL WATER-BEARING STRATA

	Depth in Feet		Thickness in	Description of Water-Bearing Formation
No.	From	То	Feet	·
1				
2				
3				
4				
5				······································

Section .	3			RECOR	D OF CAS	SING		
Dia	Pounds	Threads	De	pth	_ ,		Perior	ations
in.	ft.	in	Top	Bottom	Feet	Type Shoe	From	To
	[
				T				
	;							
					·	f	·····	·

Depth :	in Feet	Diameter	Tons	No. Sacks of	Methods Used	÷
rom	То	Hole in in.	Clay	Cement		
	i		·	· ·	·	
			· .			
	i					

Section 5 PLUGGING RECORD

Name of Plugging Contractor	License No	
	City State	······································
	hage usedType of roughage	
Plugging method used		

Cement Plugs were placed as follows:

		the statement of a particular statement of a particular statement of a	No.		of Plug	No. of Sacks Used	
		Basin Supervisor		From	To		ł
	FOR USE OF	STATE ENGINEER ONLY					
r	Date Received	SEP 30 1955	· · ·				
	1	OFFICE GROUND WATER OUPERVISOR ROSWELL, N. M. MEXICO					
Fi	le No. 2 - 1880	Use Sud	4 Dan			17.33.13.343	

Depth	in Feet	Thickness	Calar	
From	To	in Feet	Color *	Type of Material Encountered
This	WAS WOL	rk done o	n a repair Pe	emf tt_
	ſ	1 1	-from 232* to	
	4 2 F195.54 50 405.96	a circa in an inter		5.549 J 8
				
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	1			······································
The under	signed herel	hy certifies th	at to the best of hi	s knowledge and helief the foregoing is a true and cor-
rect record	of the abov	ve described v	vell.	is knowledge and belief, the foregoing is a true and cor-
				$\left(\frac{1}{2} \right) \left(\frac{1}{2} \right)$
				Well Driller
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STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section	1			n of molt	Dotest	Company of	America	
	1					Box 31		
		ł	l					New Mexico
								and is located in th
		2	ą					7 S. Rge. 33 E.
	<u>}</u> ;	- <u> </u>	f .					icense No. WD-22
		<u></u>						New Mexico
		e - 1 	Drilling w	as comm	enced	Februar	y. 2,	
		<u> </u>	Drilling w	as comple	:ted	March 1	6	
-	Plat of 640 ac							
								245
State wl	hether well	is shallo	w or artesian.	shallow		Depth to wa	ater upon con	pletion 144
lection :	2		PRIN	CIPAL WA	TER BEAL	NING STRATA		
	Depth in	Feet	Thickness in		D	escription of Wate		nation
No.	From	To	Feet	· • · · · · · · · · · · · · · · · · · ·	į.			
1-								· · · ·
2				4 y 2 2				[.]
3				<u>.</u>	•		· · ·	
4		- 1		<u>, </u>				
57 ·	<u> </u>	· .]					<u></u> .	· · ·
ection :	3		• •	RECOR	D OF CA	SING	· · · · · ·	
Dia	Pounds	Thread	ls De <u>i</u>	oth	Foot	Type Shoe	F	erforations
in.	it.	in	Top	Bottom	Feet	· ·	From	То
				1				
					-	1 .		
			DECOD			ND CEMENTING		
ection 4		T	<u>_</u>		· · · · · · · · · · · · · · · · · · ·	VD CEMENTING		
Depti From	h in Feet	Diamet Hole in		No. Sa Cem			Methods Use	
				···		<u> </u>	<u>,</u>	· · · · · · · · · · · · · · · · · · ·
					;			
						·	<u>.</u>	······
		I	(F	- <u>-</u>			
ection l	5			PLUGG	ING REC	ORD		
lame of	f Plugging	Contract	0r		· · ···		License	No
ons of	Clay used		Tons of R	oughage u	sed	Ty	pe of rougha	ge
	· .		· •					
	g approved		'		. · .		gs were place	
					j	Depth of F		
		- p~-	Basin-Sup	ervisor 1	: N	D. Language Transmission	To N	o. of Sacks Used
	-	1	É ENGLÉER Ø			· :· ·		
	FOR USE	OF STA#	e engineer ol	NEA.				
D _4	ю	a Mirest	SEP 12 ISS	<u>a</u>				* . *
Date "	Received							
	١	CRO	OFFICE UND WATER SUP	RVISOR			<u>.</u>	
			CONFLUNEW MEX					

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File No. X-1882

Location No. 17 33,13.

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-11 S

Section 6			LOG	QF.WELL- 2010 Contraction of the second s
	ı in Feet	Thickness	Color	Type of Material Encountered
From	jTo	in Feet		a po or sindowne surgounder fu
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				17.33.13.43044
·····				EUG, NU,
<u> </u>	··			Hydro. SurveyField_Check
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				SOURCE OF ALTITUDE GIVEN
				Interpolated from Topo. Sheet
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		·····		Other
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The under	signed her	eby certifies t	hat, to the best of I	nis knowledge and belief, the foregoing is a true and co
rect recor	а от тпе ар	ove described	weit.	Drif 1/1
	-		· · ·	Sudden phiston
	2 N N			Well Driller
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			$\underline{\mu}_{1}\underline{\mu}_{2}^{\mu}+\alpha_{\mu}(\underline{\mu}_{1})+\alpha_{\mu}(\underline{\mu}_{2})$	
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No. 3 CAPROCH WATER WERE No 2-1882 LA COUNTE BASIN Quilled Fee 2, 1998 Med 16, 1943 20 BUCH THIERIAC SEA, SWASEL や じゅうどうつぶ Sec. 18 1175 6835 COLLAR LEV 7129 2511 1.09 Deern GROUND Larv 41282 -20 CASMG CEMENTSO . 9.0 CASING TOP OF STIFS AREA OF PERFECTION REAL 97 6168 : 3983 S TOP OF WATER \$116/48 1442 162 TOPOF WATER \$17,55 10.51 P.G 188 200 214 TLED 225 . A. land YOTAL DEPTH 140 8/15/55: APPROX 15 FT OF SAND BAILED OUT . 295 552 12 1958 OFFICE GROUND WATER SUPERVISOR APPROVED BY POTASH COMPANY OF AMERICA LOG OF WO3CAPROCK CARLSBAD, NEW MEXICO WATER WELL DRAWING NO. DRAWN BY Dor the Starter CHECKED BY 3-1374 DATE- 8-24-35 DIRECTED BY SCALE-° 🗮 🌾 👘 RRD Kot ribanthe 1981.

Form WR-23 FIELD ENGR. L.

STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

record, o	nly Sec	tion	1A an	d Sec	tion 5 nee	ed be comp	paried.			When this	5 101111 15 11360	l as a plugging
Section 1	• •				(A) Owr	er of well	p	ntinu	ti Co of	* transro		. '
		1.1										
												located in the
		·										
		-			······································	4	l		or Section	1 <u>73</u>	wp <u>17</u> 8	Rge
		· ·			(D) DITL	ing Contra	actor		3 <u>7 Dri</u> j	1118 60.	License	No281
ĺ					City	Loving	3 2011	9 .	ant 22		StateNov	
					Drilling	was comm	enced.		epos es			19_ <u>6</u> L_
(P	lat of 64	0 ac:	res)		Drilling	was comple	eted		o pt-24 -			19_6h
levation	at top	of	casing i	in fee	t above se	ea level			Tota	depth of	well 21,4	
												ŋ
			· .					. •			in compress.	- -
ection 2					PRI	VCIPAL WA	ATER-B	EARII	NG STRAT	A		
No	Depth From		Feet To	Thi	ckness in Feet	}		Desc	ription of	Water-Beari	ng Formation	
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2												
3		1										
4				+		· · ·						
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Dia	Pound	s	Three			RECOR	D OF	I	NG Type Sh	oe	Perforati	
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ction 4					RECOR		DING	AND	CEMENT	ING		
Depth	in Feet	_	Diam	eter	Tons	No. Sa	cks of	1			•	······
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ction 5					·	PLUGG	SING F	RECO	RD	<u> </u>		<u>.</u>
ame of	Pluggi	ng (Contrac	tor						3	icense Ne	·····
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ugging :						***8***8* 0				-	- +	19
ugging	-										e placed as fo	
-05445	~P.P. 04						I				e praceti as 10	
					Basin Su	nerviser		No.	Depth From	of Plug To	No. of Sa	icks Used
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Basin Supe	TVISOF	From	То	No. pr Sacks Used	
FOR USE OF STATE ENGINEER ON	LY				
Date Received		;			
	Use And d	Donkip	un cation No	<u> 17.33.13.434</u>	1/
					‴ี่√

Depth in Feet		Thickness		M * * * * * * *
From	То	in Feet	Color	Type of Material Encountered
	· ·			This was a repair Job-on Potash Mine wel
		·	·····	Cleaned & Drilled Fr 220 ft to 240 ft.
				Run Pipe Scratcher- Set Il ft. of Il in
				casing -in Bottom of Hole & Bailed,
		· ·		
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				lan an a
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		<u></u>	· · · · · · · · · · · · · · · · · · ·	······································
· - · · · ·			·····	
		i		

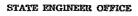
The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well

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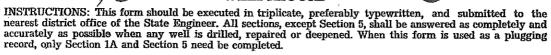
His Well Driller



5.f.



WELL RECORD



g,	ection	1
- 11	ection	1

······	(A) Owner of well Potash Company of America
	Street and Number
	City Carlabad State New Moxico
	Well was drilled under Permit No. L-1883 and is located in the
	SE 14 SE 14 6E 14 of Section 13 Twp. 17 g. Rge. 33 E.
	(B) Drilling Contractor Emmatt Barron License No.
	Street and Number
	City Carlsbad StateNew Mexico
	Drilling was commenced June 11 19_52
	Drilling was completed July 24 19.52

(Plat of 640 acres)

 Elevation at top of casing in feet above sea level
 Total depth of well
 259

 State whether well is shallow or artesian
 Shallow
 Depth to water upon completion 147

ŝ	Section	12		PRIN	CIPAL WATER-BEARING STRATA
-	No.	Depth From	in Feet	Thickness in Feet	Description of Water-Bearing Formation
-	1 2	120	135	15	Br. hard chunky sand
	3				Rr. muddy sands vory little gravel
-	4			· · · · · · · · · · · · · · · · · · ·	······································
-	5	1	· [····	1	

Section 3				RECOR	D OF CAS	SING			
Dia	Pounds	Threads	De	pth	Feet	Type Shoe	Perforations		
in.	ft.	in	Тор	Bottom		Tybe proe -	From	То	
16			0	150	150				
13 5/8			12'3"	259				·	
								•	
1						1			

~	otion	

RECORD OF MUDDING AND CEMENTING

Decenon 1			ALCONG		o cementario
Depth : From	in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
	···· _·· · _ ·· · ···				· · · · · · · · · · · · · · · · · · ·
		-		<u>.</u>	• •
1			1		

Section 5	PLUGGING RECORD		•
Name of Plugging Contractor_	· · · · · · · · · · · · · · · · · · ·	License No.	-
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used	Type of roughage	
Plugging method used	Date	Plugged	19

Plugging approved by:

Cement Plugs were placed as follows:	Cement	Plugs	were	placed	as	follows:
--------------------------------------	--------	-------	------	--------	----	----------

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY	-			-
Date Received <u>November 1, 1955</u>				· · · · · · · · · · · · · · · · · · ·
File No. L-1883 Use Ind. &	-Dom-	Lo	cation No.	17.33.13.44444

Section 6

LOG OF WELL

Depth in Feet		Thickness	(Jolen	Type of Material Encountered		
From	То	in Feet	Color	Line & Calicho		
0	20	20				
20	50	30		hard fine sand		
50	60	10		fine red sand		
60	65	5	·	br. hard sand		
<u>65</u>	80	15		fine red sand		
80	95	15	· ·	br. hard chunky sand		
95	120	40		fine sand		
120	135	15	<u> </u>	br. hard chunks sand		
135	145	10		fine sand		
145	147	2		hard sand		
147_	150	3		red bed		
150	170	20		fine sand		
170	173	3	<u></u>	rød bed		
173	210		:	fine & cores sand some gravel		
210	219	9		red bed		
219	239	20	<u> </u>	br. muddy sands		
239	241/	2		course gravel		
241	259		• •	red bed-some gravel		
		· · · ·		LS Elev 4//2.3r Depth to KTrc_24/- Elev of KTrc_388.2r		
				17.33.13.4444		
				Loc. No.		
				Hydro. SurveyField Check		
	· · · · · · · · · · · · · · · · · · ·			SOURCE OF ALTITUDE GIVEN		
				Determined by Inst. Leveling		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

1-1883 17.33.13.444

/s/ Emsett Sarron Well Driller

STATE ENGINEER OFFICE

20 S.F.

Vra,

Form WR-23

Date Received.

...

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

[<u> </u>					Corpany of I		-
			Street and			1 LA 14	<u>وند نې بې بې کې کې کې</u> د م م د	
			City					
							and and	
							3Twp. 17 S	
·	·						Drig. Colice	nse No. Willig-
			Street and	Number	- Box U	21		
· · ·		i	City	ovingto	0		State	en lexico
	- 10-		Druning Ms	is comme	nceu		6	
`(Pl	at of 640 ac	res)	Drilling wa	is comple	ted		• 85	19 55
Elevation	at top of						pth of well	
							ter upon comple	
			14 A. (1997)					5. 1. J.
Section 2				IPAL WA	TER-BEAR	ING STRATA		
No	Depth in From 1		ckness in Feet		De		r-Bearing Formatic	
			 					· · · · · · · · · · · · · · · · · · ·
1							-	
-2			······				······	
3 :				· .				
4								
5		·		-			-	
				DECOR		INC		
Section 3								orations
Dia in.	Pounds ft.	Threads in	Dept Top	Bottom	Feet	Type Shoe	From	To
	n 	· <mark></mark>						
			-					
			-					· · · · · · · · · · · · · · · · · · ·
		:	-					
!		• •						
Section 4			RECORD	OF MUD	DING AN	ID CEMENTING	·	······································
	in Feet	Diameter	Tons	No. Sa			Methods Used	-
From	То	Hole in in.	Clay	Cem	ent			
	<u> </u>			-				
				<u>.</u>		·	<u> </u>	
·····	<u> </u>		<u> </u>	. ·				
	1		l <u></u> .	<u> </u>	<u> </u>	<u> </u>		<u> </u>
Section 5				PLUGG	ING REC	ORD		
		Contractor			-		License No	`
vane of	Trugging	Contractor			City		State	J
							/pe of roughage	
Lons of C	hay used.		TOUS OF 140	ugnage u			/pe of roughage ugged	10
			·					
Jugging	approved	by:			r		igs were placed a	S IOHOWS:
	:	Propagation of the second s	Barin Cro-		N	Depth of I	1 No. (of Sacks Used
			Basig Suge	SATRON.	1	From	To	
			ale and a second se	Redarder and State of States	anzesy Q			-
		OF STATE EN	ale and a second se	Redarder and State of States	anacasi.			-

File No. 2-1883 Use Ind & Dom. Location No. 17. 33.13.444

O F F I C E GROUND WATER SUPERVISOR ROSWELL NEW MEXICO

			· · · · · · · · · · · · · · · · · · ·					
Section 6 LOG OF WELL								
Depth	in Feet	Thickness	Color	Type of Material Encountered				
From	То	in Feet						
				- Pall 230 St. 8 P page Clean out and ball				
				hale and reads many				
				entime and a designed the second to				
	·	in a south		and the second				
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	1							

The undersigned hereby certifies that, to the best rect record of the above described well. of his knowledge

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DATTON & PONTER BRILLOND COMPANY Dr. R. Caller • • ì 20 S T

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# FIELD MGR. LOG

#### STATE ENGINEER OFFICE



#### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Dwner of well and Number Carlabad was drilled under Perr 46 EE 16 SE	Box 31 mit No. L-1863	State	New Maxico I is located in the
was drilled under Per	mit No	and	l is located in the
1/ SE 1/ SE	14 of Continu IT	77_9	
The second secon	74 OL DECLION	Twp*	Rge 33 E
<u> </u>	P & F Drilling Go	Licer	ise No.
t and Number	121 S. Love		
Lovington			
ng was commenced	Aug 21		19 60
	Ang 21		10
1	ng was commenced	ng was commenced Aug 21	ng was commenced Aug 21 ng was completed Aug 21

Elevation at top of casing in feet above sea level______Total depth of well_____Total depth of well______Total depth of well_______Total depth of well______Total depth of well______Total depth of

Section	2
---------	---

### PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet Thickness in			Description of Water-Bearing Formation
	From	то	To Feet	
1				
2				
3	1			· · · · ·
4				· · · · · · · · · · · · · · · · · · ·
5		[	-	

Section 3 RECORD OF CASING									
Dia	Pounds	Threads in	Depth		Feet	Two Shee	Perforations		
in.	ft.		Top	Bottom	Teet	Type Shoe	From	То	
				Nodø				<u></u>	

Section 4

#### **RECORD OF MUDDING AND CEMENTING**

	in Feet	Diameter	Tons	No. Sacks of	Methods Used	
From	To	Hole in in,	Clay	Cement	ement	
	<b></b>	7	Nonie		······································	
				· · · ·		

#### Section 5

#### PLUGGING RECORD

Name of Plugging Contractor		License No.	***************
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used		**************************************
Plugging method used	· · · · · · · · · · · · · · · · · · ·	Date Plugged	
Plugging approved by:		Cement Plugs were placed as fo	llows:

Y M M TO Basin Supervisor	No,	Depth From	of Plug To	No. of Sacks Used
FOR USEIONER AND TO OTO OTO OTO OTO OTO OTO OTO OTO OTO	 			 

1946 - ¹ 1

Section 6			OF WELL			
Depth	in Feet	Thickness in Feet	Color	Type of Material Encountered		
				This was a clean out job, on a Romanti		
				well, for a Potaeh Mine.		
				Fighed out suction pipe, and cleaned well from 70 ft to 100 ft.		
<u></u>		· · ·				
<u> </u>						
	199 ⁴⁷					
<u>.                                    </u>	. <u>.</u>			· · · · · · · · · · · · · · · · · · ·		
·····						
· - · · - · · · · · · · · · · ·				······································		
••••••				- -		
	<b>`</b>		<u></u>			
	<u>.</u>		· · · · · · · · · · · · · · · · · · ·			
	-					
				· · · · · · · · · · · · · · · · · · ·		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

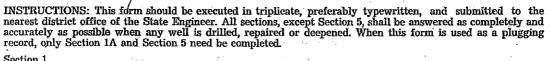
V. ( Well Driller No nue

1

1

Form WR-23

# Jetate engineer office WELL RECORD



Section 1	L			(A) Owner of well Lidiand Brilling Company
		• :		Street and Number 40 % Chic Ste
				City Midland State State
· · · ·	· · · ·	Ĩ.		Well was drilled under Permit Noand is located in the
	}	Ϋ́.	÷ * *	Castor 4 1 3 st of Section 17 Twp. 17 8 Rge. 33 8
, -	[	3	1	(B) Drilling Contractor Carties Delga Con License No. WD-185
:				Street and Number Box 1021
		) · ·		City State State
1	l	·	-	Drilling was commenced 19.57
(1	l Plat of 6	10 acres)	<u>I</u>	Drilling was completed 19.57 19.57

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth From	in Feet	Thickness in Feet	Description of Water-Bearing Formation
1			in an	Stuka - Nava
2		200		Kator Sand
3				
4				
5			•	

Section 3	3 .			RECOR	D OF CAS	ING		
Dia	Pounds	Threads	De	epth .	Feet	Type Shoe	Perfo	rations
in.	ft.	in	Top	Bottom	reel	Type proc	From	То
- FØ	37	10	0	- 225	226	Nese	180	225
ð					1. (°			
		<u> </u>					·	
			1				1	

Se	etior	14.

Plugging approved by:

#### RECORD OF MUDDING AND CEMENTING

DODWOIL 2						
Depth From	in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement		Methods Used
_18	226	- 30	500 lbe.		Dry Mix.	Hole Cravel packed
					ta a	
	1					

Section 5	PLUGGING RECORD	
Name of Plugging Contractor		License No.
Street and Number	City	State
Tons of Clay used7	ons of Roughage used	Type of roughage
Plugging method used	Date	Plugged19

# Cement Plugs were placed as follows:

5.2 ×

Basin Supervisor	No.	Depth From	of Plug	- No. of Sacks Used
FOR USE OF STATE INCHAER OF				
Date ReceivedOFFICE				
GROUND WATER SLIPERVISOR ROSWELL, NEW MEXICO File No. 2-3622 Use DU	S	L	ocation No	. 17.33.17.12444

Thomas the	in Feet	Thickness	t -	1
From	To	in Feet	Color	Type of Material Encountered
-0	2		<u>.</u>	Se11
	32	10		Calicha
- 32	18	Ŕ		Bouldar
	1380	342		
			. *	Sand, Shell, & Cley
180	200	20	·····	Tetter Stad
	- 1284-			Sand, Shell, & Gravel
224	- 825	<u> </u>		Red Bed
<u>.</u>	-		·····	4207
	· ·		·	LS Elev 4 au
				Depth to K7733
	1	· ·	· · ·	
·····				
Ŧ				10 22 10 12000
		•		Loc. No. 17.33.17.12444
		·	<u> </u>	Hydro. SurveyField Check X (Not Found)
				SOURCE OF ALTITUDE GIVEN
•				Interpolated from Topo. Cit et
				Determined by Inst. Leveling
	· · · · · · · · · · · · · · · · · · ·			Other
				. <u> </u>
			· · · · · · · · · · · · · · · · · · ·	
			·	
		<u> </u>	·	
				<u> </u>
e under	signed hereh	v certifies the	t. to the best of	his knowledge and belief, the foregoing is a true an
ct record	l of the abov	e described w	ell.	······································
	-		•	

2-3622 17.33.17

#### Form WR-23



STATE ENGINEER OFFICE



#### WELL RECORD

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Section 1

. . . . . . .

Section 1	A) Owner of well KEWANEE OIL COMPANY
	Street and Number MALJAMAR, HEW HEXICO
	City State
	Well was drilled under Permit No TATE WATER SELLand is located in the 
	(B) Drilling Contractor C. O. ALBREDGE License No. 79 Street and Number Box 379
	City Lovinoton State New Mexico
	Drilling was commenced JUNE 6 19 53
(Plat of 840 percer)	Drilling was completed JUNE 28 19 55

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth i From	n Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	169	186	16	LIGHT WATER SAND
		213		G950 WATER JAND
4			· · · · · · · · · · · · · · · · · · ·	
5				

RECORD OF CASING Section 3 Depth Pounds Perforations Threads Dia Feet Type Shoe Top in. ft. in Bottom From To 214.6 0 10 32 8 214-6 214.6 182 制命财货

Depth :	in Feet	Diameter	Tons	No. Sacks of	Methods Used
From	То	"Hole in in.	Clay	Cement	Mithidia User
		151			O SAGKS OF AQUECEL POUNED IN TO
	•				of Hole to Hold Hack Quickband
۰.	i i			1	WHILE ORILLING WELL

Section 5	PLUGGING	RECO	RD	· ·· ·	
Name of Plugging Con	tractor				icense No
	, Ci				
Tons of Clay used	Tons of Roughage used.		· · · · ·	Type of 1	oughage
Plugging method used			Date	Plugged	19
Plugging approved by:	÷	1	Cement	Plugs were	e placed as follows:
! ••••••••		No,		of Plug	No. of Sacks Used
	Basin Supervisor		From	To	
FOR USE OF	STATE ENGINEER ONLY				
Date Received	JUL 28 1955				
	OFFICE			·	
	GROUND WATER SUPERVISOR				
File No. 2- 27	76 Use 24	han	ie Lo	cation No.	12 33 18 200
	4 NN 00-2-203-1				สารการการการทุกที่สารการการการการการการการการการการการการกา

Section	£

Depth in Feet		Thickness	Color	Type of Material Encountered		
From	То	in Feet				
0	3	3	BROWN	Sett		
3	68	65	RED	SAMO		
68	71	3	GRAY			
71	98	17	WHITE	CALLONE		
98	117	19	RED	SAND		
117	129	12	WHITE	CALICHE		
129	163	34	RED	SAND		
163	165	2	BROWN	SHALE		
165	189	24	REO	SAND AND GRAVEL LIGHT WATER SAND		
189	192	3	LIGHT GRAY	LINE SHELL		
192	198	6	RED	SAND		
198	213	15	Breve	WATER SAND Geog		
213	214	1	RED	SHALE.		
Run	10" PH	213 <u>97 3</u> 8	-6 GLEANED OL	JT DROVE PIPE FROM		
	213-6 10	214-6 -	ONE FOOT IN			
		TOTAL	DEPTH 214.6	$\begin{array}{c c} 1 \text{ S Elev} & 4/2/5 \\ \hline Depth to K & Trc 2/3 \\ \hline Elev of K & Trc 4/002 \\ \end{array}$		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Loc. No. Hydro: Survey

Other

¥

Determined by Inst. Leveling

SOURCE OF ALTITUDE GIVEN Interpolated from Yopo, Sheet

PBU 17.33.9.241111

Field Check

Х

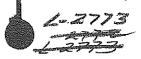
17.33.18.200

1-2770

Form WR-23



STATE ENGINEER OFFICE



#### WELL RECORD

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	etio	
200		

	(A) Owner of well KEWAREE OIL COMPANY
	Street and Number City MALJAMAR Well was drilled under Permit No. EXTREME CORNER N.E. CORNER SW. 18 Twp. 17 Rge. 33
# 3 017 0.0 - 2 - 203-1	(B) Drilling Contractor       C. O. HLDREDGE       License No. 79         Street and Number       Bax 379         City       Lovington         Drilling was commenced       JUNE 1         Drilling was completed       JUNE 6
(Plat of 640 acres)	Diming was completed and a complete
Elevation at top of casing in fe	et above sea level
State whether well is shallow	or artesian SHALLOW Depth to water upon completion. 184

PRINCIPAL WATER-BEARING STRATA Section 2 Depth in Feet Thickness in Description of Water-Bearing Formation No. Feet From То 1 196 214 18 QUICK SAND -2-3 4 5

Section	3	•		RECOR					
Dia in.	Pounds	Threads	Depth		Feet	Type Shoe	Perforations		
	· ft.	in	Top	Bottom	reet	TADE 2006	From	То	
-10			* 0	214	214 7	Reo Asp			
	VELL AL	READY CA	DEB WHI	N CLEAN	LEO OUT	<u>.</u>			
	<u> </u>			· · · · · · · · · · · · · · · · · · ·					
	1			ł				ľ	

Section 4

#### RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	Clay	Cement	ALCHOUS CHOR
		N	e Mub Us	60	
	·				
	 		-		

Section 5

#### PLUGGING RECORD

Name of Plugging Contractor	······································	License No.	•••
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used	Type of roughage	
Plugging method used	Date	Plugged19	-

#### Plugging approved by:

Basin Supervisor	No,	Depth From	of Plug	No. of Sacks Used	
FOR USE OF STATE ENGINEER ONLY					
Date ReceivedJUL 11 1955					
Ó 2 FICE GROUND WATED E DERVISOR ROSWELL NEW MEXICO			1		n N
File No. <u>- 2773</u> Use Main	ċ	L	ocation No	. 17,33.18 32Z	X

Cement Plugs were placed as follows:

Depth	in Teat	Thickness		
From	To	in Feet	Color	Type of Material Encountered
		<u>`</u>	<u>.                                </u>	د. د
			······	
196	_214	18	RED	QUICK SAND
		· · · · · · · · · · · · · · · · · · ·		
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·····				
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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

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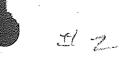
ell Driller ŀ

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### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section					ed be con	thread.				•	used as a plug	
	1.				ner of wei		1. 61. A & &	ee 01	L Co.			
				Street a	nd Numbe	Bex.	124					
				City	STATE	WATER	WELL	_UK [1]		4 *****	45×	
			2	0/9@1 pres	a MrBled L	uhiller 2	esat 1	MUNIC Rom N	IPAL Eșt L	USE INCON	d is located in	
					/4	⁷⁴ d	'g of	Section.	062	Twp	Rg#.9	
			- 1		mug com	ractor			·····	Lice:	nse No.	
				Street ar	nd Number	<b>T</b> SN					iew Mexico 55	
1	1 [			City			Jus	<b>γ </b> 4		State	55	
				Dritting	was comn	nenced		LY-16			95	
()	Plat of 640	acres)		Drilling	was comp	leted					19	
Elevatio	n at top o	of casing i	in fee	t above s	ea level	4200.		Total	depth /	کک of urall	10	
State w!	hether we	ll is shall	ow o	r artesiar	SKALLO	¥	D	epth to	water 1	unon comple	tion	
Section 3					NCIPAL W					apon compic		•
1	 Depth i	n Feet		ekness in		ATER-BI						
No.	From	To		Feet	1		Descript	ion of W	ater-Bea	ring Formatio	n.	
1 21	02	215	1	8	Quic	K SAN	Ø					
-2			<u> </u>		-							
3											<u></u>	
4					.							
5								•				
!_	<u>}</u>		I <u></u>		<u> </u>						··	
ection 3	3				RECO	ND OF C	CASING					
Dia	Pounds	Threa	ds		pth	Feet		pe Shoe		Perfo	rations	
in. 0 3/4	tt. 40.5#	în N		Top	Bottom	215.				From	To	
	100.041			·	Co. 9 49.00.00		Биң 	· ·	FADY			
<u> </u>		-	Well	WAS D	RILLED	4+19	-47 -9		aela wi	166-01-66-64	ed aut	
		-										
									t			
		<u> </u>			I	· · · · · · · ·					 	
ection 4				RECOR		DDING	AND CE	MENTIN	 G .			
Depth	in Feet	Diamet		Tons	No. Sa	cks of		MENTIN				
		Diamet Hole in		Tons Clay	No. Sa Cem	cks of lent	AND CE	MENTIN		thods Used	<u></u>	
Depth	in Feet			Tons Clay	No. Sa	cks of lent		MENTIN		thods Used		
Depth	in Feet			Tons Clay	No. Sa Cem	cks of lent		MENTIN	Me		ED-	
Depth	in Feet			Tons Clay	No. Sa Cem	cks of lent			Me	TI.I	<u></u>	
Depth	in Feet			Tons Clay	No. Sa Cem	cks of lent	144		Me	TI.I	<u></u>	
Depth From	in Feet			Tons Clay	No. Sa Cem ID USED	cks of lent			Me	JUL 28	955	
Depth From	in Feet	Hole in	in.	Tons Clay NO-M	No. Sa Cem ID USED PLUGG	Cks of lent	CORD		Me		1955 CE SUPERVISOR	
Depth From	In Feet	Contracto	in.	Tons Clay NO M	No. Sa Cem ID USED PLUGG	icks of lent	CORD			JUL 28 JUL 28 OFFI DUND WATER	955	
Depth From	in Feet To Plugging d Number	Contracto	in.	Tons Clay NO ML	No. Sa Cem ID USED PLUGG	cks of ient	CORD			JUL 28 OFFI OFFI SUNALINATION	1955 CE SUPERVISOR N MEXICO	
Depth From ction 5 ame of reet and ns of C	In Feet	Contracto	in.	Tons Clay NO M	PLUGG	cks of tent	CORD		Me	JUL 28 OFFIC OFFIC SUNALINARY STATE roughage	955 CE SUPERVISOR MARXICO	
Depth From ection 5 ame of reet and ms of C ugging 1	in Feet To Plugging d Number	Contracto	in.	Tons Clay NO M	PLUGG	cks of tent	CORD	Date P	Me	JUL 28 OFFI OFFI DUND WATER DUND WATER	955 CE SUPERVISOR W MERICO	
Depth From ection 5 ame of reet and ons of C ugging 1	In Feet	Contracto	in.	Tons Clay NO M	PLUGG	cks of tent	CORD	T Date P ment Pl	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	JUL 28 OFFIC OFFIC SUNALINARY STATE roughage	955 CE SUPERVISOR W MERICO	
Depth From Section 5 ame of reet and ons of C ugging 1 ugging 1	In Feet	Contracto	in.   	Tons Clay NO Mi	PLUGG	cks of tent	Cee	Date P	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	UIL 28 OFFI OFFI SUNDWATER STATE roughage re placed as	955 CE SUPERVISOR W MERICO	
From ection 5 ame of creet and ons of C iugging 1 ugging 1	In Feet	Contracto	in.   	Tons Clay NO Mi	PLUGG	cks of tent	Cee	T Date P ment Pl Pepth of	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	UIL 28 OFFI OFFI SUNDWATER STATE roughage re placed as	1955 CE SUPERVISOR MAEXICO 19 follows:	
Depth From ection 5 ame of creet and ons of C ugging 1 ugging 1	In Feet	Contracto	in.	Tons Clay NO Mi	PLUGG	cks of tent	Cee	T Date P ment Pl Pepth of	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	UIL 28 OFFI OFFI SUNDWATER STATE roughage re placed as	1955 CE SUPERVISOR MAEXICO 19 follows:	
Depth From ection 5 ame of creet and ons of C ugging a ugging a	In Feet	Contracto	in.	Tons Clay NO Mi	PLUGG	cks of tent	Cee	T Date P ment Pl Pepth of	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	UIL 28 OFFI OFFI SUNDWATER STATE roughage re placed as	1955 CE SUPERVISOR MAEXICO 19 follows:	
Depth From ection 5 ame of reet and ons of C ugging 1 ugging 2	In Feet	Contracto	in. Dr T T JUL O	Tons Clay NO Mi	PLUGG	cks of tent	Cee	T Date P ment Pl Pepth of	Me CP CP CP CP CP CP CP CP CP CP CP CP CP	UIL 28 OFFI OFFI SUNDWATER STATE roughage re placed as	1955 CE SUPERVISOR MAEXICO 19 follows:	

Tunce Relivi Location No. 17.

2773

. Use

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File No.

32

33.

Depth i		Thickness	Color	Type of Material Encountered
From	То	in Feét		
202	215/	13	Reð	QUICK SAND
215	220	5	Red	Red Bed
		·····		
•	· · · · · ·			
			······	
				<u>tstlev</u> <u>4225</u>
				Depth to K273-
				Elev of KTrc_40/01
				FV 17.33.18.3223
	:			
				Loc. No.
	÷	· .	·	Hydra, Survey Field Check X
	· · _ ·			
		· · ·		· · · · · · · · · · · · · · · · · · ·
				SOURCE OF ALTITULE BOARD
				Interpolated from Topo. Silest
		<u>├</u>		Determined by Inst. Leveling
			·	Other
			······································	
r	· · · · · · · · · · · · · · · · · ·			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

1-2773

Well Driller

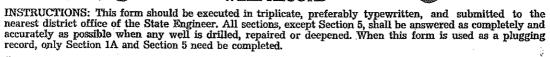
17.33.18.322





#### STATE ENGINEER OFFICE

### WELL RECORD



#### Section 1

Section 1	(A) Commence and all and there are all and	
	(A) Owner of well Henry Black Drillin	g Company
	Street and Number Box 174	
	City <u>vidland</u>	State
We losated 200'	Well was drilled under Permit No	
look & token Burg	¼¼_ N K ¼ of Section 28	Twp. 17.5 Rge. 33 E
i you shin she die Now used for diameiter	(B) Drilling Contractor Carten Drig. Co.	License No. #D-183
used for anantal.	Street and NumberBox 1021	•
	City Lovington	StateNew Maxies
	Drilling was commenced	
	Drilling was completed Neve	mber 20 19 57
(Plat of 640 acres)		and the second sec

Elevation at top of casing in feet above sea level  $\frac{1/2/6}{2}$  Total depth of well 208 25. State whether well is shallow or artesian Shallow Depth to water upon completion 288 25.

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth From	in Feet	Thickness in Feet	Description of Water-Bearing Formation
1	188	191.	6	Water Sand
2	203	207	5	Water Sand & Gravel
3				
4				
5	· · ·		Ì	

Section 3 RECORD OF CASING									
Dia	Pounds	Threads	Depth		Feet	Tune Chee	Perforations		
in.	ft.	in	Top	Bottom	. reer	Feet Type Shoe	From	То	
	20	20	0	208	208	Nons	21.8	208	
·		i							
		·.					,		
	· · · · <b>· · · · · · · · ·</b> · · · · · ·								

Section 4

### RECORD OF MUDDING AND CEMENTING

Depth in Feet         Diameter           From         To         Hole in in.		Tons Clay	No. Sacks of Cement	Methods Used	
20	208	. 10	400 263.		Dry Viz; hole gravel, peeked
		· · · · · · · · ·			
	1				

Section	5

### PLUGGING RECORD

Name	of Plugging Contractor		License No	
Street	and Number	City	State	
Tons o	f Clay usedTons of Roug	shage used	Type of roughage	

Plugging method used...... Plugging approved by: ___Date Plugged_____19

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·	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	Cement Plugs were placed as follows:

·	No.	Depth	or Plug	No. of Sacks Used	
Basin-Supervisor	1	From	To	No. of Sacks Osed	
FOR USE OF STATE LEGISLER ONES		· · ·			
Date Received FEB 10 1958					
OFFICE GROUND WATER SUPERVISOR					
ROSWELL, NEW MEXICO			a na sana na sana na sana na sana na sana san	สมแสมประสาทธิอให้มีเป็นการและเหตุการสมบัตรอย่างการที่มีการกับสารสอบสารอยู่และสูง เป็น	
File No. <u>2-3726</u> Use <u>8.2</u> 3.	D,	Lo	cation No.	17.33.18.230	ĺ
	ana aka kata ka			23-113-1	(

Coo	41	c
Sec	tion	Б.

#### ***246E 4....

Section 6		LOG OF WELL									
Depth i	in Feet	Thickness in Feet	Color	Type of Material Encountered							
0	1	. 2.		3011							
Ref.	<u>ŝ</u> .			Calieba							
8	32			kulder							
22	18	6		Calluhe							
18	26	8		Boulder							
26	188	162	2	Sandy Chry Shall							
388	1.94			Tertan Cand							
	203	9		Sandy Olay							
203	207	5		Water Sand & Gravel							
207	208			Red Bud							
		&		2. 474.9 - 2042431							
		99. 19	· · ·	42161							
				L S Elev Depth to K							
				L S Elev         4/2/6           Depth to K         Trc 207/           Elev of K         Trc 4/004/							
• • •											
				Loc. No. 17, 33, 18, 22113 Hydro. Survey Field Check X							
			· · · · · · · · · · · · · · · · · · ·	Loc. Wo							
·	······································	·····	· · · · · · · · · · · · · · · · · · ·	Hydro. Survey							
···· ····		····-·									
	<u>`</u>										
<u></u>											
, <u></u>											
		<u></u>		SOURCE OF ALTITUDE GIVEN							
			·	Interpolated from Topo, Strict							
				Determined by Inst. Leveling							
· · · · · · · · · · · · · · · · · · ·											
				······································							
<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	•									

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

L-3726

CATTON DRILLING COMPANY

17.33.18.230

Form, WR-23



STATE ENGINEER OFFICE



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

	(A) Owner of well warren and Brudshew Suple & Brg. Co.
	Street and Number. 2504 Lost Grunson
	CityState
	Well was drilled under Permit No. 2-2875 and is located in the
	14 14 14 of Section 70 Twp. 17 1 Rge. 34
	(B) Drilling Contractor. Abbatt Brothers License No. 31-44
	Street and Number 2. 0. 302 437
	City Kobbe
	Drilling was commenced 1955
	Drilling was completed 1955
(Plat of 640 acres)	
Elevation at top of casir	ng in feet above sea levelTotal depth of well50
State whether well is sl	nallow or artesian stanting. Depth to water upon completion 190
Section 2	PRINCIPAL WATER-BEARING STRATA
1	

No.	No. Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation		
1	100	235	45	actor and isternities (Low yield)		
3				· · · · · · · · · · · · · · · · · · ·		
4						
5				e		

Section 3	3			RECOR	D OF CAS	SING		
Dia	Pounds Threads		Depth		Feet	Turna Shaa	Perforations	
in.	ft.	in	Тор	Bottom	Teer	Type Shoe	From	To
17	37	É.	0	250	250		100	
1					20.00		alle of the	~~~~
								, ,

Section 4

#### RECORD OF MUDDING AND CEMENTING

Methods Used	No. Sacks of	Tons	Diameter	in Feet	Depth
	Cement	Clay	Hole in in.	То	From
			****		
		·		· · · · · · · · · · · · · · · · · · ·	

A 19.5	
Section	Э

#### PLUGGING RECORD

Name	of Plugging Contractor		License No	,
Street	and Number	City	State	
Tons (	of Clay used	Tons of Roughage used	Type of roughage	

Plugging method used	Date	Plugged	

#### Cement Plugs were placed as follows: Plugging approved by: Depth of Plug No, No. of Sacks Used **Basin Supervisor** From то FOR USE OF STATE ENGINEER ONLY MAY <del>28</del> -1955 OPFICE Date Received AROUND WAT IS MITTARY 1:56 ROSWELL NEW ASSIGO 7875 . Úse. Location No. 17,33,20, 220 File No. \$100 00 -202-1 1. . . . . . .

		······································		DF WELL	:
Depth From	in Feet	Thickness in Feet	Color	Type of Material Encountered	
	7	9		3011	
1	9	<u>á</u>		<u>Caliche</u>	
_ <u>_</u>	60	51		<u> </u>	
60	1.20	60	-	Send	
20	_190	70		richt Sand	
<u> 90</u>	235	45		Vater Sand	
35	250		· · · · · · · · · · · · · · · · · · ·	Sandy Clay	
<i></i>					
				·	
	1		· · · · ·		
	1	1			
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		<u> </u>			-
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<u>.</u> .	<u> </u>	ļ	<u> </u>		
	ļ				
				·	
	·	1			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Morrill abbett Well Driller

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Form WR-23



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STATE ENGINEER OFFICE



### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

1 1	· · · · · · · · · · · · · · · · · · ·	(A) Owner of well milling possibility Corp.
		Street and Number 200 1963
		City State Toxic
		Well was drilled under Permit No. Appland & 3/33 and is located in the
		Conter4 18 4 58 4 of Section 23 Twp. 17 B Rge. 33 E
		(B) Drilling Contractor Capton & Perton Brigs CosLicense No. up 163
		Street and Number Box 1021
'		City Lorington, State Hor Medico
	· .	Drilling was commenced polynery 29 19 56
		Drilling was completed 19 56
(Plat of 64	0 acres)	

Elevation at top of casing in feet above sea level_____Total depth of well_____Total State whether well is shallow or artesian Shallow Depth to water upon completion 160

Section	12		PRINC	IPAL WATER-BEARING STRATA
No.	Depth From	in Feet   To	Thickness in Feet	Description of Water-Bearing Formation
1	158	198	1,0	vatar Sand-diraval
3				· · ·
4				
5		1		

Section 3	3			RECOR	D OF CAS	SING		
Dia	Pounds	Threads	De	epth	Feet	Type Shoe	Perf	orations
in.	ft.	in	Top	Bottom	reet	Type price	From	To
	32	8	0	_230	230	None	360	

Section 4

#### RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	Clay	Cement	Menious Oseu
				F	

#### Section 5

#### PLUGGING RECORD

Name of Plugging Contractor	ľ <u></u>	License No	0
Street and Number	City	State	
Tons of Clay used	Tons of Roughage used		
Plugging method used	·	Date Plugged	
Plugging approved by:		Cement Plugs were placed a	s follows:

#### Cement Plugs were placed as follows:

Basin Supervisor	No.	Depth From	of Plug To	No. of Sacks Used	
FOR USE OF STATE ENGINEER ONLY		· .	- '		
Date Received MAR 14 1953					
ROSWELL, NEW MERICO UN	0			313201	 
File No. 3/33 Use Qu	£	L	ocation No.	313207 (7 <b>,33,33,3</b> 64	$\langle / \rangle$
۲۰۵۵ ۲۰۱۹ ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹ - ۲۰۱۹					¥ 

	1 Feet	Thickness		
From	To	in Feet	Color	Type of Material Encountered
0	8	8		Rock
8		<u>k</u>	· · · · · · · · · · · · · · · · · · ·	
12	20	8		Rook
20		92	· · · · · · · · · · · · · · · · · · ·	- Sand
218	158	16		Sendy Clay
158	198		· · · · · · · · · · · · · · · · · · ·	Reter Sand & Gruvel
198			- -	
220	-230	10		Pod Ciny
				LS Elev $\frac{4/14/3}{Depth to K}$ Elev of K Trc 392.3
				<u> </u>
				Loc. No.
				Hydro. SurveyFiold_ChackX
	· · · ·			SOURCE OF ALTIFUDE GIVEN
		· ·		Interpolated from Topo, Sheat
				Determined by Inst. Leveling
				Other
		· · ·		· · · · · · · · · · · · · · · · · · ·
		······	······	· · · · · · · · · · · · · · · · · · ·

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

L-3133

Well Driller

مرية المرابر وم

17.33.23.310





STATE ENGINEER OFFICE



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#### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

~~		1	

	Street and Number	
	Well was drilled under Permit No	and is located in t
	 (B) Drilling Contractor P & P Drilling	Co. License No. WD 281
-	Street and Number South Love	
	 City Lovington Drilling was commenced Sept 2	State New Mexico

State whether well is shallow or artesian Shallow Depth to water upon completion 70 ft

Section 2

PRINCIPAL WATER-BEARING STRATA

No.:	Depth in Feet From   To		Thickness in Feet	Description of Water-Bearing Formation						
1	 / ^R.	1.111.1	asiri	****			· ·			
2	·						······································			
3										
4			•			· ·				
5				······································	·····	· · ·	······································			

Section 3	3	RECORD OF CASING								
Dia	Pounds	Threads in	Depth		Feet	Type Shoe	Perforations			
in.	ît.		Top	Bottom	1.000	LADE BIIGE	Fr	om	To	. م. هاکنهند
7 In.	hole				no ca	bing				
- 1- × 186	1.015					DTHE.				
· · ·						;				
			·							

Section 4			RECORD	OF MUDDING ANI	D CEMENTING
Depth in Feet		Diameter	Tons	No. Sacks of	Methods Used
From	To	Hole in in.	Clay	Cement	ALAGATEAN CARACT
			······································		· · · · · · · · · · · · · · · · · · ·
					· · · · · · · · · · · · · · · · · · ·
· ·	•.				
} I			· · · · · · · · · · · · · · · · · · ·		

Section 5 PLUGGING RECORD

Name of Plugging Contractor		License No
Street and Number	City	State
Tons of Clay used	Tons of Roughage used	Type of roughage
Plugging method used	Date	Plugged19

Plugging approved by:

Cement Plugs were placed as follows:

·	······	No.	Depth	of Plug	R. M. S.	• P 🖓
Basin-Supervis	50E-1		From	To	No. of Sacks Used	÷
FOR USE OF STATE ENGINEER ONLY				1. The second second		_
Date Received SFP 26 1958	, i i -					
OFFICE	<u> </u>		·			-
GROUND WATER CLEARVISC koswell, new Mesoco	SR SR	in the second				ne se
File No. <u>2-3/33</u> Us	e 1. 20.D		Lo	cation No.	17.33.23.310	-

ection 6 LOG OF WELL								
Depth i From	n Feet To	Thickness in Feet	Color	Type of Material Encountered				
		i ja	· · · ·	This is an old well drilled March 1956				
			:	and later plugged, well was 230 ft. of 7"				
				casing. We drilled out plug, clean out				
: :				and bailed out hole; to be used for oil we Drilling purposes				
· · ·								
·	•••							
<u>.</u>		· · · ·	<u> </u>	· · · · · · · · · · · · · · · · · · ·				
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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

•	Grady Backus Well Driller
	х так так так так так так так так так так
· · · · ·	

# STATE ENGINEER OFFICE WELL RECORD

R. LÖG

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INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

		Street and Numb	per Roy 2105			······································
		City	Hobha	State	New Nextoo	
		Well was drilled	under Permit No. 1.313	3a	nd is located	in the
\$	3					
			ntractor Clayton Waser			
0			oer			
	<u> </u>		Iovington			
	· · .	Drilling was con	nmenced		19	)
1	1		pleted Well reopened		1 A A A A A A A A A A A A A A A A A A A	

12 Elevation at top of casing in feet above sea level______Tith_____Total depth of well_____ 2301

State whether well is shallow or artesian Shallow Depth to water upon completion *

Dept		Depth in Feet Thick		Tion	minition of Wotor Boon	ing Formation		
No	From	To	Feet	Des	Description of Water-Bearing Formation	ing rormation		
1		-		* See origina	l well record.	· · · · · · · · · · · · · · · · · · ·		
2						· · · ·		
3							-	
4	1	·.				-	: :	
5				· · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		·······	

Section 3 REC					D OF CAS	ING			•
Dia	Na Pounds Threads Depth Feet Type Sh		Type Shoe	Perfora	tions				
in.	ft.	in	Top	Bottom	. Feet	Type Suce	From	То	
*yn	20 & 23	8	0	230	230		*		÷.
			-					····	

Section	n 4

1

Form WR-23

#### RECORD OF MUDDING AND CEMENTING

From	Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	·	Methods Used	· · ·
					None		
· ·		-					
						· · · · ·	
						· · · · · · · · · · · · · · · · · · ·	

Name of Plugging	Contractor		License	No
Street and Number	<u></u>	_ City	State:	
Tons of Clay used	Tons of Roughage u	ised	Type of roughag	je

_Date Plugged.

.19

Plugging	method	u	seđ
Diverging	00000000	Ы	har

Plugging approved by:	Cement Plugs were placed as follows:					
Basin Supervisor	No.	Depth From	of Plug	No. of Sacks Used		
Date Received USER ON SLATE TO SEE OF STATE TO SEE OF SEE OF STATE TO SEE OF S	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		
File No. <u>メー 3/33</u> Use の.とし. L	) 	Ľ	ocation No.	17.33.23.3/0		

Section	6

3

#### LOG OF WELL

-	Depth in Feet		Thickness Color		Type of Material Encountered				
-	From	То	in Feet						
-	•				Sse original well repord.				
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				. ÷					
		· ·							
	:			<u> </u>					
-	·····	<u> </u>							
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PHILIPS PMRD BULLPCOMPANY

Form WR-23



STATE ENGINEER OFFICE



## WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed. Land Commissioners Prospectors No. M2902

section 1	, (A) Owner of well	Southwest Potash Co.			
	Street and Number				
		Carlsbad State N. M.			
		ermit Noand is located in the 4 of Section25Twp17_SRge33E			
# 5 - 6 - 2 - 153 - 5	(B) Drilling Contractor	T. M. Theriac License No.			
	City	Hobbs State N.			
		April 8 19 50			
(Plat of 640 acres)	Drilling was completed	<u>April 21</u> 19 50			

Elevation at top of casing in feet above sea level______Total depth of well______ State whether well is shallow or artesian______Depth to water upon completion 137 (reported)

Section	1 2		PRIN	CIPAL WATER-BEARING STRATA
No.	Depth From	in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	137	187	<u>50 -</u>	Tertiary Sands and gravels
2				
3		-		
4				
5	· · · ·			· · ·

Section 3	ion 3 RECORD OF CASING								
Dia in.	Pounds	Threads	Depth		_ Feet	Type Shoe	Perforations		
	ft.	in	Top	Bottom	reet	Type Suce	From	To	
13 3/8		New s	eamless		194'8"	Bethleham Texas Patt	94!2" ern	193'4"	
					- <u></u>	, ` ·	·		
								·	

Section 4

#### RECORD OF MUDDING AND CEMENTING

	in Feet	Diameter	Tons	No. Sacks of	Methods Used
From	То	Hole in in.	Clay	Cement	Mernous Oseu
				F	et est

Contion	5
Section	່ມ

### PLUGGING RECORD

Name of Plugging Contractor		License No	·: :
Street and Number	City	State	
Tons of Clay usedTo	ons of Roughage used	Type of roughage	······
Plugging method used	· · · · · · · · · · · · · · · · · · ·	Date Plugged	
Plugging approved by:		Cement Plugs were placed as fol	lows:

	No.	Depth	of Plug	No. of Sacks Used
Basin Supervisor		From	То	NO. OF DACKS USER
FOR USE OF STATE ENGINEER ONLY				
Date Received December 29, 1952				
	L			د 
) IL QE				
File No. 1695 Use		L	ocation No.	17.33.25.244 4/4

.

Depth	in Feet	Thickness	Ge2	Time of Material Encountered			
From	· To	in Feet	Color	Type of Material Encountered			
0	18			Hard crust top soil, caliche various hardne			
18	28			Harder caliche fragments			
28	38	·		Larger caliche fragments			
38	50			Caliche and fine sil, approx. 20% brown same			
50	60			Fine dry sand, clear red brown particles			
60	105			Red, brown and clean sand, few particles			
				hard limestone			
105	110			Fine sil and brown sand-quicksand			
110	115			90% small clear & brown sand, trace of lime			
115	130			Sil of various size, small brown & clear sa			
130	135			Sil and brown and red sand			
135	137			Hit water at 137; brown and clear quicksand			
137	160			Larger particles sil-sand more popous			
160	174			Few large particles brown and clear sill &			
				quarts. Small flakes of red compaction s			
174	180			Clear, brown, red and owange sand			
180	185			Sand same - few $\frac{1}{2}$ " to 1" and gravel, small			
				flakes of red clay			
185	190			Red and brownish clay in much larger quanti			
190	200			Solid red bed, sand disappearing fast			
200	225			Red bed solid, no sand encountered.			
				[SElei 43931			
				Depth to KTrr 1900			
				I S Elev         40.93r           Depth to K         Trc 190r           Elev of K         Trc 3203r			
<u> </u>				17.33.25, 24444 Loc. No Hydro. SurveyField CheckX			
				LOO. NO.			
				Hydro. Surveyrield Unech			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

T. M. Theriac Well Driller :. -." SOURCE OF ALTITUDE GIVEN Interpolated from Topo. Sheet 🔀

Determined by Inst. Leveling

Other:

17.33.25.244

rorm WR-	-23 O.E	in the second seco	, 5.£.	STATE ENGIN			Phillightat	e Lease
TALCOPLET	CHIRANCE, 4	Thin form		WELL R		)	Waver we	11
nearest di accurately	listrict offic y as possil	ce of the S blo when	State Engined any well is d	er. All section	s, except S ed or deer	ection 5. sl	pewritten, and so hall be answered a en this form is us	s completely and
Section 1		•	(A) Own	er of well 2	арата І	ETROLE	M CORP.	
· [	Ī		1				· · · ·	
							State	
							and	
							Twp. 17 S	
			1			-	lers Licens	
							State _N(	
		Į	Drilling v	vas commence	noos	Öcta	ber 21	10 57
	<u> </u>		· · ·				<u>ber 23</u>	
-	lat of 640 ac	•				-		
							pth of well	
State whe	ether well	is shallow	or artesian	BUSTT	De	epth to wa	ter upon completi	on none
Section 2			PRIN	CIPAL WATER	-BEARING	STRATA		
No	Depth in From	To	Thickness in Feet	-	Descript	ion of Wate	r-Bearing Formation	
1	None		·	· .				
2								
3				·			· · · · · · · · · · · · · · · · · · ·	
4		·····		• • • • • • •	· ·		<u> </u>	
5		<u>}</u>						
Section 3				RECORD C	F CASING			-
Dia	Pounds	Threads		E	eet T	rpe Shoe	Perfora	tions
in. [	ft.	in .	Тор	Bottom		- 	From	То
		+				••		
~		· · ·					•	
Section 4			1		····	MENTING		
From	in Feet	Diameter Hole in i		No. Sacks Cement	or		Methods Used	
	·							-
	 -		· ·					
				PLUGGING	RECORD			
Section 5 Name of	Plugging	Contractor	ſ				License No	
Section 5 Name of Street and	d Number			C	ty		State	
Section 5 Name of Street and Fons of C	d Number. Nay used			oughage used	ty	Ту	State pe of roughage	
Section 5 Name of Street and Fons of C Plugging	d Number Day used method us	ed.		oughage used	ty		State pe of roughage ugged	19
Section 5 Name of Street and Fons of C Plugging	d Number. Nay used	ed.		oughage used	tyC	Ty Date Plu ement Plu	State pe of roughage ngged gs were placed as	19
Section 5 Name of Street and Fons of C Plugging	d Number Day used method us	eđ. by:		oughage used	tyC	Ty Date Plu ement Plu Depth of P	State pe of roughage ngged gs were placed as hug	19
Section 5 Name of Street and Fons of C Plugging	d Number. Day used method us approved 1	ed. by:	Tons of R	ervisor	tyC	Ty Date Plu ement Plu Depth of P	State pe of roughage ngged gs were placed as	19 follows:
Section 5 Name of Street and Fons of C Plugging	d Number. Day used method us approved 1	by:	Tons of R	Ci oughage used	tyC	Ty Date Plu ement Plu Depth of P	State pe of roughage ngged gs were placed as	19 follows:
Section 5 Name of Street and Tons of C Plugging Plugging	d Number. Day used method us approved 1	by:	Tons of R Basin Sup ENGINEER O C 3 0 1957	Ci oughage used	tyC	Ty Date Plu ement Plu Depth of P	State pe of roughage ngged gs were placed as	19 follows:
Section 5 Name of Street and Tons of C Plugging Plugging	d Number. Iay used method us approved i FOR USE	ed. by: OF STATE DI GROUM	Tons of R Engineer of C 3 0 1957 OFFICE D WATER SUPE	Ci oughage used eropor NLY	tyC	Ty Date Plu ement Plu Depth of P	State pe of roughage ngged gs were placed as	19 follows:
Section 5 Name of Street and Fons of C Plugging Plugging Date R	d Number. Day used method us approved D FOR USE Received	ed. by: OF STATE DI GROUN kos	Tons of R Basin Sup ENGINEER O C 30 1957 O FFICE D WALL NEW MAX	ervisor	tyC	Ty Date Plu ement Plu, Depth of P rom	State pe of roughage ngged gs were placed as	19 follows: Sacks Used

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ection 6		. <u></u>	· LOG	
Depth i From	in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	9	······································	
<u> </u>	16	15		caliche
16	210	394	······································	dry sand
	• .			
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				······································
		<u> </u>		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller

Form WR-23



#### STATE ENGINEER OFFICE



#### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed. **...** 

(A) Owner of well E1 Paso Nat	400
Street and Number P. O. Box 14 City El Paso	StateT0288
<u>NE 14 NE 14 NE 14 of Se</u>	Misc. 2-1-58       and is located in th         ction       29       Twp.       178       Rge. 335         Bros.       License No.
, , , , , , , , , , , , , , , , , , ,	637
 City Hobbs	StateNew Mexico
Drilling was commenced	
Drilling was completed July 2:	2, 1958 ₁₉ .58

Total depth of well 244* Elevation at top of casing in feet above sea level____ State whether well is shallow or artesian Shallow 2041 ......Depth to water upon completion.

Section	2
---------	---

#### PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in	Description of Water-Bearing Formation						
	From	To	Feet							
1	185	228	43	Water Sand						
2			÷							
3										
4					· ·					
5					-	· · · · · · · · · · · · · · · · · · ·				

Section 3	•			RECOR	D OF CAS	SING		
Dia	Pounds	Threads	Depth		13	Type Shoe	Perforations	
in.	I Cel	P CCL	Type Sube	From	To			
6 5/8			0	244	244		168	244
			Ŀ				·	

ction A	 RECORD OF MUDDING AND CEMENTING	

Section 4		· ·	RECORD	ORD OF MUDDING AND CEMENTING					
Depth in Feet		Diameter	Tons	No. Sacks of	a	Methods Used			
From	To	Hole in in.	Clay	Cement		Methous Osed			
-									
		· · ·							
}				· · ·					
ļ		1							

Section 5 PL	UGGING RECORD	·	•
Name of Plugging Contractor		License N	ło
Street and Number		1. T. 1. 1.	
Tons of Clay used	age used		<u>)                                    </u>
Plugging method used	·	Date Plugged	
Plugging approved by:	Ce	ement Plugs were placed	as follows:

	Basin Supervisor	No.	From	To	No. of Sacks Used	
NAMES OF	FOR USE OF STATE INCIDENT ONLY				anna an	
THE OWNER OF	II INVISIO					
NEW KING	Date Received 301400 433WIDNJ-31718			· · ·	· · · · · · · · · · · · · · · · · · ·	Į
A 100 COLORADOR DA	1961 MA 1 F AAM 1961					
A Sun statement of the	File No. Micc. 2- 6-58 Use Sude	i bi	) 1070. I.a	ocation No.	17.23. 24.22.2.22	

Depth	in Feet	Thickness	0-1	Warns of Matavial Eucountered
From	То	in Feet	Color	Type of Material Encountered
0	1	1		S011
1	18	17		Caliche
18	80	62		Sand
80	85	5		Sand rock
85	125	40	•	Sand
125	185	60		Tight sand and Rock
185	228	43		Water, sand
228	244	16		Sand and Red Clay
			·	4188
				LSELEV
				Depth to KTrc_ <u>37444</u>
				•
				Loc. No. 17. 33, 29. 222
				Loc. No.
				Mydro. SurveyField Cheek
				SOURCE OF ALTITUDE GIVEN
		· ·		Interpolated from Topo. Sheet
	-			Determined by Inst. Leveling
			· · ·	Other
	•		· · · · · · · · · · · · · · · · · · ·	-

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

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Well Driller

# STATE ENGINEER OFFICE

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Revised June 1972



(A)	Owner of well	Owner's Well No.	· · · ·
	Street or Post Office Address		
Well	was drilled under Permit No	and is located in the:	
	a ¼ ¼ ¼ of Section	A Township Range	N.M.P.M.
	b. Tract No, of Map No,	of the	
	c. Lot No of Block No Subdivision, recorded in	of the County.	
	d. X= feet, Y=	feet, N.M. Coordinate System	Zone in Grant.
(B)	Drilling Contractor	License No	
Addi	ess		
Drill	ing Began Completed	Type tools Size of hole	in,
Eleva	ation of land surface or	at well is ft. Total depth of well	ft.
	pleted well is 🛛 shatlow 🗂 artesian.	Depth to water upon completion of well	
	Section 2, PRINCIPA	AL WATER-BEARING STRATA	

Depth in Feet		Thickness	Description of Water-Bearing Formation	Estimated Yield		
From To		in Feet	Description of water-bearing Formation	(gallons per minute)		
•						
		,				
			·			

### Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Depth i	Depth in Feet		Type of Shoe	Perforations	
(inches)	per foot	per in.	Тор	Bottom	Length (feet)		From	То
		<u></u>					ļ	
	•						<u> </u>	

Section 4.	RECORD	OF	MUDDING	AND	CEMENTING	
Deenon i,	110010	<u> </u>			••••••	

Depth in Feet		Hole Sacks		Cubic Feet	Method of Placement
From	То	Diameter	of Mud	of Cement	
		í			
			j		
				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	1	2	l		

#### Section 5. PLUGGING RECORD

Address		No	Depth	in Feet	Cubic Feet
Plugging Method		NO.	Тор	Bottom	of Cement
Date Well Plugged					,
lugging approved by:		2			
·		3			
	State Engincer Representative	4			

FOR	USE OF :	STATE	ENGINEER	ONLY

Date Received	Typed	5/11/78	
			Quad

FWL _____ FSL___

Use 011 Location No. 17.33.30.11000

.....

File Nó.____

Depth ir		Thickness	Color and Type of Material Encountered
From	Ţo	in Feet	
0	28		Caliche and gravel
2.8	223	,	Shale and shells
223	515	· · · ·	Red rock
51.5	533		Anhydrite
			· · · ·
		· · · · ·	
	······		
		V	(113 A
	<u></u>		L S Elev 4/0.3.9 Depth to KTrc2.8
			Elev of KTrc_ <u>4011</u>
		<b>_</b>	· · · · · · · · · · · · · · · · · · ·
		<u> </u>	· · · · · · · · · · · · · · · · · · ·
		}	· · · · · · · · · · · · · · · · · · ·
	······		<u></u>
	- <u> </u>		
4			
<u> </u>			· · ·
		Section	7. REMARKS AND ADDITIONAL INFORMATION
This wel	1 record	is an exce	rpt from Oil Conservation Commission files at Hobbs, N.M.
Location	: 17.33.	30,11000	Elevation: 4039' DF
	Continent	al Oil Co. it Battery	
Record o	f Casing:	10"	- 21'
Rotary		7"	- 3913'
-	- 660' F	WL	
	$\nu$		
The undersigned iescribed hole.	hereby certi	fies that, to the	e best of his knowledge and belief, the foregoing is a true and correct record of the a
aogeridea noie.	•		400 KB Aur

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instructions: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district of of the State Engineer. Alternations, except Section 5, shall be answered as completely and accurate possible when any we drilled, repaired or deepence when this form is used as a plugging record, only Section 1(a) and Section need be completed.

#### STATE ENGINEER OFFICE

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# WELL RECORD

#### Section 1. GENERAL INFORMATION

(A)	Owner of well Street or Post Office Address City and State	· · · · · · · · · · · · · · · · · · ·	's Well No
Well	was drilled under Permit No	and is located in the:	
	a, ¼ ¼ ¼ of Section.	Township Ran	geN.M.P.M.
	b. Tract No of Map No,	of the	
	c. Lot No of Block No Subdivision, recorded in		
	d. X= feet, Y=		
(B)	Drilling Contractor	· ·	·
Addı	ess	· · · · · · · · · · · · · · · · · · ·	
Drill	ng Began Completed	Type tools	Size of hole in.
Elev	tion of land surface or	at well is ft. Total depth	of well ft.
	pleted well is 💭 shallow 🗋 artesian,		
	Section 2. PRINCIPA	L WATER-BEARING STRATA	
	Depth in Feet Thickness		Estimated Yield

	in Feet	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To	п геет		(gatons per minute)
				1. 1
			· · · ·	
	1			. {
· · · ·	,			
		·		
	<u> </u>	l		<u></u>

#### Section 3 RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet Length		reads Depth in Feet Length		Perfor	ations
(inches)	per foot	per in,	Тор	Bottom	(feet)	Type of Shoe	From	То
		· · ·	<u></u>		·		· [· · · · · · · · · · · · · · · · · ·	
				ļ				
				· · · · · · · · · · · · · · · · · · ·	<u></u>			
			-					
							1	

#### Section 4. RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Hale	Sacks	Cubic Feet of Cement	Method of Placement
From	То	Diameter	of Mud	of Cement	
	· · · ·		, .		·
			······	}	
				}	

#### Section 5. PLUGGING RECORD

Plugging Contractor						
Address	· · · · · · · · · · · · · · · · · · ·		Depth	in Feet	Cubic Feet	
Plugging Method		No.	Тор	Bottom	of Cement	,
Date Well Plugged	· · · · · · · · · · · · · · · · · · ·	1				
Plugging approved by:		2		1		
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	3		1		
	State Engineer Representative	4				-
				L		_

FOR USE OF STATE ENGINEER ONLY =711/70

Date Received	Typed	5/11/78	FOR USE OF STATE ENGINEER UNLT
			Ouad
	-		

_ FWL _____ FSL_

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File No..

Use _______ Location No. ______17.33.30.12000

.

_____

Depth in		Thickness	Color and Type of Material Encountered
From	To	in Feet	· · · · · · · · · · · · · · · · · · ·
0	45	<u> </u>	Caliche and sand
45	375		Red bed
375	1145		Red bed, red rock
	···		· · · · · · · · · · · · · · · · · · ·
			L S Elev 405 7
			Depth to KTrc2 Elev of KTrc_ <u>4012</u>
	,		
		·	/
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
		·	
			·
			•
		·	· ·
		Section 1	7. REMARKS AND ADDITIONAL INFORMATION
This well	record 1	s an excer	pt from Oil Conservation Commission files at Hobbs, N.M.
Location:	17.33.3	0.12000	Elevation: 4057' DF
Owner: C	ontinenta	1 Oil Co. t Battery	
Record of	Casing:	8 ¹¹	4 #134 - 1185'
Rotary			· · · · · ·
	10001	1.77	
660' FNL	— ТАЯЛ, <u>F</u>	ж <u>ы</u> .	
~			• •
	•		
he undersigned escribed hole.	hereby certif	ies that, to the	best of his knowledge and belief, the foregoing is a true and correct record of the abo
everioen noie.			
			· ·

of the State Engineer. A group when this form is used as a plugging record, only Section 1(a) and Section when this form is used as a plugging record, only Section 1(a) and Section when the completed.

# STATE ENGINEER OFFICE

#### WELL RECORD

#### Section 1. GENERAL INFORMATION

į

(A)	Street or Post Office	Address			Owner's Well No.	
Well	was drilled under Perm	nit No		and is locate	ed in the:	
	a ¼	. 1/4 1/4	¼ of Section	Township	Range	N.M.P.M.
	b. Tract No.	of Map No		of the		
		of Block No ded in			<u></u>	
	d. X≖ the	feet, Y≕		feet, N.M. Coordinat	e System	Zone in Grant.
(B)	Drilling Contractor				License No	
٨dd	1855		·····		·	
Drill	ing Began	Complet	ed	Type tools.	Size of hole	in.
Elev:	ation of land surface of	r		at well is	ft. Total depth of well	ft.
	pleted well is			-	er upon completion of well	

#### Section 2. PRINCIPAL WATER-BEARING STRATA

Depth	in Feet	Thickness	Description of Water-Bearing Formation	Estimated Yield
From	<u> </u>	in Feet	Description of water-bearing rotination	(gallons per minute)
	· · · · · · · · · · · · · · · · · · ·			
			· · · · · · · · ·	
·····				
		1		

#### Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet Length True of Chao		Depth in Fect		Thurs of Chas	Perfor	ations	
(inches)	per foot	per in. Top Bottom		per foot per in. Top Bottom (feet)		Top Bottom		Type of Shoe	From	То
		<u> </u>	······································							
					·	<u> </u>	{ }			
				}						

Section 4. RECORD OF MUDDING AND CEMENTING

n Feet	Hole	Sacks	Cubic Feet	Method of Placement
· To	Diameter	of Mud	of Cement	
		-		
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	·			· · · · · · · · · · · · · · · · · · ·
			-	

#### Section 5. PLUGGING RECORD

Plugging Contractor				
Address	No.	Depth	Cubic Feet	
Plugging Method	NO.	Тор	Bottom	of Cement
Date Well Plugged	1			
Plugging approved by:	2			
	3			
State Engineer Representative	4			

Typed 5/11/78 FOR USE OF STATE ENGINEER ONLY

Date Received

Quad .....

____ FWL _____ FSL_

File No.	Us	e 011	Location No	17.33.30.14000
1 10 100,		•		

Depth i		Thickness in Foot	Color and Type of Material Encountered
From	To	in Feet	
0	30		Caliche
30	85		Caliche and sand
			· · · · · · · · · · · · · · · · · · ·
	810		Red bed and red rock
		· · · ·	
	~		1 S Elev 4072 DF
			Depth to KTrc83
			Elev-of K787
			· · ·
			<u> </u>
[	· ]		
			· · · ·
			· · · · · · · · · · · · · · · · · · ·
	`		
		-	
		······································	
	J	Section	7. REMARKS AND ADDITIONAL INFORMATION
This wel	1 record d	s an exce	rpt from Oil Conservation Commission files at Hobbs, N.M.
			Elevation: 4062' GL
Location Owner:	Continenta	1 011 Co.	
Record o	MCA Uni f Casing:	t Battery 10"	4 #135 20'
	_0,	-	
Rotary			
1980'FN	L - 1980'	<b>W</b> L	
	1	-	
The undersigned	hereby certif	ies that, to th	e best of his knowledge and belief, the foregoing is a true and correct record of the abo
lescribed hole.		<b>,</b>	
			Driller

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#### Revised June 1972

STATE	ENGINEER	OFFICE

## WELL RECORD

# Section 1. GENERAL INFORMATION

(A)	Street or	Post Office A	ddress			Owner's Well No.			
Well	was drilled	1 under Permi	t No,	·····	and is loc	ated in the:			
	a	¼	14 14	_ ¼ of Section_	Townsh	ip R	ange	N.M.P.M.	
	b. Tract	No,	of Map No		of the		- <u>-</u>	····	
			_ of Block No ed in					<u></u>	
					. feet, N.M. Coordii	nate System			
(B)	Drilling (	Contractor				License No.	·	·	
Addı	ess			-				<u> </u>	
Đrill	ing Began		Comple	ted	Type tools		Size of hole	in.	
Eleva	tion of la	nd surface or			at well is	ft. Total dept	th of well	ft.	
Com	pleted wel	ll is	shallow 🔲 . arte	sian.	Depth to v	vater upon completio	on of well	ft.	
			Sectio	n 2. PRINCIPAI	WATER-BEARIN	G STRATA			
	Depth in Feet Thickness		Descrij	ption of Water-Bear	ing Formation	on Estimated Yield (gallons per minute)			
				ļ		<u>.</u>			

•		
	 -	 

#### Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Threads Depth in Feet		Length	Type of Shoe	Perforations	
(inches)	per font	per in.	Тор	Bottom	(feet)	Type of anoc	From	To
		<u>.                                    </u>		<u> </u>				<u>`</u>
							1	
	<u></u>							

Section 4. RECORD	OF	MUDDING	AND	CEMENTING
-------------------	----	---------	-----	-----------

Depth	Depth in Feet		Hole Sacks		Method of Placement	
From	То	Diameter	of Mud	of Cement		
		· .				
	· · · -		······	• • • •		
	ł	}			· · · · · · · · · · · · · · · · · · ·	

# Section 5. PLUGGING RECORD

Plugging Contractor			Douth	ia Root	
Plugging Method		No	Тор	in Feet Boltom	Cubic Feet of Cement
Date Well Plugged	· · · · · · · · · · · · · · · · · · ·				
Plugging approved by:		2		ļ	
	·	3		1	•
State Enginee	r Representative	4		· · · · · · · · · · · · · · · · · · ·	
F	OR USE OF STATE ENG	GINEER ONLY			

Date Received	Typed	5/11/78		
			Ouad FWL	FSL

File No.

UseC	)il	Location No	17.33.30.31111

Depth		Thickness	Color and Type of Material Encountered
From	To	in Feet	
0	66		Sand
66	73		Rock
73	96		Sand
96	160		Réd bed
160	270	· · · · · · · · · · · · · · · · · · ·	Red sand and red bed
270	437		Red bed
437	546		Red bed and shells
546	608		Red bed and blue shale
608	628		Red bed
628	650	} ,	Sand
650	791	· · · · · · · · · ·	Red bed, sand, shells, shale
791	806		Lime shells
806	1078		Shale, ared bed
		l 7	L S Elev 4037 Depth to K74
			Elev of KTrc <u>314/</u>
		·····	
	<u> </u>		
		<u></u>	· · ·
			i
	·.		

Elevation: 4037' DF

Driller

Locatio	on: 17.33.3	0.31111		
Owner:	Continenta	1 0il Co.		
	MCA. Und	t <b>#197</b>		
Record	of Casing:	8 5/8"		128'
	-	7백	-	3963'

Rotary

2615' FSL - 25' FWL

r

The undersigned here by certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. A propriate district of the answered as completely and accurate possible when any well is drilled, repaired or deependent then this form is used as a plugging record, only Section 1(a) and Section a need be completed.

STATE	ENG	INEER	OFFICE	
W	ELL	RECO	RD	

Revised June 1972

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#### Section 1. GENERAL INFORMATION

(A)	Owner of well Street or Post Office Address City and State	i	· · · · · · · · · · · · · · · · · · ·		
Well	was drilled under Permit No		and is located in the:		
	a ¼ ¼ ¼	¼ of Section	Township	Range	N.M.P.M.
	b. Tract No of Map No	. <u></u> 0	f the		
	c. Lot No of Block No Subdivision, recorded in				
	d. X [™] feet, Y [™]		-		
(B)	Drilling Contractor				
Add	ress		······································		
Drill	ling Began Com	pleted	Type tools	Size of hole	in.
Elev	ation of land surface or		t well is ft, T	otal depth of well	ft.
Con	pleted well is 🗍 shallow 🗍 .	artesian.	Depth to water upon o	completion of well	ft.

# Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness	Description of Water-Bearing Formation	Estimated Yield				
From		in Feet	Description of water-bearing romation	(gallons per minute)				
-								
1.	l							
	1		·					
	Ť.			4				

#### Section 3. RECORD OF CASING

Diameter Pounds		Threads	Depth	in Feet	Length	Type of Shoe	Perforations		
(inches)	per foot	per in.	Тор	Bottom	(feet)		From	То	
							ĺ		
		· · · · · · · · · · · · · · · · · · ·				···`			
	<u> </u>	i		<u> </u>		<u> </u>			
							ſ		

Section	Δ	RECORD	OF	MUDDING	AND	CEMENTING
accuon	ч.	RECORD	OT.	MODDING	man	CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement		
From	To	Diameter	of Mud of Cement				
· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·		
					· · · · · · · · · · · · · · · · · · ·		

#### Section 5, PLUGGING RECORD

Plugging Contractor	No.	Depth	in Feet	Cubic Feet
Plugging Method	NO,	Тор	Bottom	of Cement
Date Well Plugged		•		
Plugging approved by:	2		· · ·	
	3			
State Engineer Representative	4			

FOR	USE	OF	STAT	ΓE	ΕN	GIN	EER	ONI	ĽΥ

Date Received	Typed	5/11/78	FOR USE OF STATE ENGINEER ONLY
-			Quad FWL FSL
File No			Use 011 Location No. 17.33.30.42000
-			· · · · · · · · · · · · · · · · · · ·

Donth	in Feet	Thickness	Section 6. LOG OF HOLE
From	To	in Feet	Color and Type of Material Encountered
0	98		Caliche and sand
	145		Sand and gravel
	1171		Red rock and red bed
145	1717		
		<u> </u>	
<u> </u>			
			LS Elev
			Depth to KTrc Flev of KTrc
			Intel MI. Bases were supplified with the second statements of the secon
		-	<u>}</u>
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
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			<u></u>
	·		
		· · ·	
		*	•
		Section	7. REMARKS AND ADDITIONAL INFORMATION
This we	li record d	s an exce	rpt from Oil Conservation Commission files at Hobbs, N.M.
	n: 17.33.3		Elevation: 4060' DF -
	Cities Ser	vice Co.	
Record (	S. M. G of Casing:		hit Tract 1 #2 - 1199'
Rotary	e.	•	
		זיזיקי	
TA80. E	SL - 660'	r EL	•
	1 · · · ·		·
The undersigne described hole,		ies that, to the	e best of his knowledge and belief, the foregoing is a true and correct record of the ab
acserioeu note,			
			Driller
INSTRUCTIO	NS: This form s	hould be exec	uted in triplicate, preferably typewritten, and submitted tasks appropriate district off

# FIELD ENGR. LOG

STATE ENGINEER OFFICE



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3214 32

# WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

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Form WR-23

pine pice pice pice pice pice pice pice pic	, (A) Owner of well Dillard & Walternier D	rilling CO.
	Street and Number PO. Box 1206	
	City Odessa	State Texas.
· · ·	Well was drilled under Permit No. L = 4363	and is located in the
	<u>NW 4 NE 4 SN 4 of Section 35</u>	Twp17_SRge33_E
	(B) Drilling Contractor C. O. Aldredge	License No.W D 79
	Street and Number FO. Box 379	
	City Lovington	
	Drilling was commenced Dec. 29	
	Drilling was completed Jan. 5	19.60
(Plat of 640 acres)	· ·	
Elevation at top of casing in f	eet above sea level	of well 226
State whether well is shallow	or artesian Shallow Depth to water	upon completion 160 Ft
Section 2	PRINCIPAL WATER-BEARING STRATA	

No.	Depth	in Feet	Thickness in	Description of Water-Bearing Formation
	From	To	Feet	· · · · · · · · · · · · · · · · · · ·
1	170	180	10	Brown water sand
2	183	200	17	Brown water sand & gravel
3		· ·		·
4				· · · · · · · · · · · · · · · · · · ·
5				· · ·

RECORD OF CASING Section 3 Depth Perforations Dia Pounds Threads Type Shoe Feet in. ft. in Top Bottom From To -Ø X 65/8 Welded 教教堂 **T**76 222 222 222 None

Section 4

÷.

#### **RECORD OF MUDDING AND CEMENTING**

Depth From	in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used 6secks of aquegell pored in hole while
					well was beeing drilled
- 1997					
;					

Section 5 PLUGG	ing reco	RD	· ·
Name of Plugging Contractor			License No
Street and Number	. City		State
Tons of Clay usedTons of Roughage us	sed	Type of	roughage
Plugging method used		Date Plugged	19
Plugging approved by:		Cement Plugs we	re placed as follows:
Basin Supervisor	No.	Depth of Plug From To	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY			۲
Bata Provinced BULLO VARMEND PLARE			

52 18 WU 61 NHP- 0861

4363

File No.

Use D.S. D. Location No. 17.33.35

Depth From	in Feet	Thickness in Feet	Color	Type of Material Encountered
0	. 2	2	Brown	soil
2	30	28	White	Calchie rock
 30	70	<u>10</u>	Brown	sand
70	тло	70	Red	sand
ThO	150	10	White ·	Caliche
1 <u>40</u> 150	I50 I52	2	Red	Same Shale
152	T70	т8	Red ?	Sand
170	170	 I0	Brown	water sand
180	I8G	3	Red	shale
183	200	17	Brown	water sand &gravel
200	222	22	Red	Shale & sand rock
222	226	1	Red	Red bed
				LS Elev $4/22^{1/2}$ Depth to K Trc $222r^{2}$ Elev of K Trc $3900r^{2}$ $7r^{3}3r^{3}5r^{3}32r^{4}r^{2}$
				Loc. No Hydro. Survey Field Check X
<u></u>		\		
				SOURCE OF ALTITUDE GIVEN Interpolated from Topo, Shase Determined by Inst. Leveling Other
		2		

1-4363

17. 33.35.321

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### STATE ENGINEER OFFICE



#### WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

	(A) Owner of well OTLF OTL COMPONATION
	Street and Number Pole, MCF 2167
	City State State
	Well was drilled under Permit Noand is located in the
	<u><u><u>14</u></u> <u>14</u> <u>14</u> <u>14</u> of Section <u><u>17</u> <u>0</u> <u>Rge. 90</u> <u>c</u></u></u>
	(B) Drilling Contractor.
	Street and Number P.O. Max 637
	City State State
0	Drilling was commenced 19
	Drilling was completed 19.63
(Plat of 640 acres)	-

233 Elevation at top of casing in feet above sea level_____Total depth of well____ 

Section	2		PRINC	CIPAL WATER-BEARING STRATA
No.	Depth From	in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	150	290	60	wher and
3				
4				
5				

ection S	}			RECOR	D OF CAS	ING		
Dia	Pounds	Threads	De	epth	Feet	Type Shoe	Perfor	ations
in.	ft.	in	Top	Bottom	reet	Type pupe	From	То
7	20	10	· Ø	285	833	opera	150	239
			{			· · · · ·		
								· · ·

RECORD OF MUDDING AND CEMENTING Section 4 No. Sacks of Depth in Feet Diameter Tons Methods Used Hole in in. Clay Cement From To ١,

Section 5	PLUGGING RECORD		
Name of Plugging Contractor		License No	
Street and Number	City	State	
Tons of Clay usedTons	of Roughage used	Type of roughage	·····
Plugging method used	Dat	e Plugged.	

Plugging	approved	by:
----------	----------	-----

	<b>N</b> T-	Depth	of Plug	
Basin Supervisor	No.	From	То	No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY II JUISOU Date Received JUISU JUISOU			· ·	
20:8 MA 11 APA E361				
File No. <u>L-5696</u> Use	<u>ow</u>	)Lc	eation No	. <u>17 33 35.433</u>

Cement Plugs were placed as follows:

QUED- KK

Section 6

log of Well

Depth i		Thickness	Color	Type of Material Encountered
From	То	in Feet	Color	Type of material Encountercu
0		1		<u>sol</u>
	10	19		øeliohe
20	160	132		888đ
150		- 64		weet eand
280	222	9		eandy alsy
				· · · · · · · · · · · · · · · · · · ·
		··· ··· · ·	·····	
				· · · · · · · · · · · · · · · · · · ·
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		<b> </b>		
				· · · · · · · · · · · · · · · · · · ·
<del></del>				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Munice Well Driller pn

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STATE ENGINEER OFFICE



Location No. 1833 35.93332

WELL RECORD INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging

Street and Number       Street and Number       State         City       City       State         Well was drilled under Permit No.       2-5096       State         14       14       14       14       State         15       16       Drilling Contractor       Twp. 15       L         16       Drilling Contractor       Street and Number       L	
City       State         Well was drilled under Permit No.       2-5096         Well was driter No.       2-5096	
Well was drilled under Permit No.       2-5096         Well was drilled under Permit No. </td <td></td>	
1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4 <td></td>	
1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4     1/4 <td>and is located in the</td>	and is located in the
(B) Drilling Contractor L 280 F54 Street and Number 863 + 100 CM	
2 80 F5 K Street and Number Room Mark Cart	icense No.
1 μ/μ/μ/ City State	Mariles discussed about
	19 <u>ex</u>
Total Heading in fact about no loval	2019
levation at top of casing in feet above sea fever.	-1-4 A.C.T.
tate whether well is shallow or artesian Depth to water upon com	ipietion
ection 2 PRINCIPAL WATER-BEARING STRATA	
No. Depth in Feet Thickness in Description of Water-Bearing Form	ation
No. From To Feet	
1 200 220 EQ TOTOP cont	
3	
• • • • • • • • • • • • • • • • • • •	
4	
5	
ection 3 RECORD OF CASING	
	erforntions
Dia Foundas Inteaus	To
	2.96
	····
	1
ection 4 RECORD OF MUDDING AND CEMENTING	
Don'th in Foot Diameter Tone No Sacks of	
Methods Use	ed.
	<del>.</del>
	,
	· · · · · · · · · · · · · · · · · · ·
	<u> </u>
ection 5 PLUGGING RECORD	
	M
Well was drilled under Permit No.       2 - 5 - 7 - 4       and is located in the         A       Well was drilled under Permit No.       2 - 5 - 7 - 4       and is located in the         A       Well was drilled under Permit No.       2 - 5 - 7 - 4       and is located in the         A       Well was drilled under Permit No.       2 - 5 - 7 - 4       and is located in the         A       Well was drilled under Permit No.       2 - 5 - 7 - 4       Interview of the Second was and the Secon	
lugging approved by: Cement Plugs were place	d as follows:
No Depth of Plug	n of Sacks W
Basin Supervisor No. From To N	U. DI DACKS USED
FOR USE OF STATE ENGINEER ONLY	
	· · · · · · · · · · · · · · · · · · ·
Date Received 10 VEINISNE TIVIS	
	······································
30 38 MA 1 1 AAA 5361	******

2 wp

Use

5055

OWD-OK

File No.

Section 6

2

16 in

 $q, \bar{q}$ 

log of Well

Depth	in Feet	Thickness	Color	Type of Material Encountered
From	То	in Feet	Color	Type of Waterial Encountered
ø	1. 100	đ		0012
and .	18	ii)		naisana
<i>.</i>	250	123		oent
280	280	80		valat and
an	233	ø		aandy alog
· · · · ·		**************************************	**************************************	* ************************************
	1	i		
				412.01
				412.07 L S Elev Depth to K Trc 2.337 Elev of K Trc 38.871
		· · · · · ·	<u> </u>	Depth to K
			·····	
				100 No. 17.33.35,43332
	ļ			
				Hydro. SurveyField Check
			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
				SOURCE OF ALTITUDE GIVEN
				Interpolated from Topo. Sheet
				Datermined by Inst. Leveling
			······································	Other
· · · · · · · · · · · · · · · · · · ·				
				2
	· · · · · · · · · · · · · · · · · · ·			
· ·· <del>··</del> · -·				
				· · ·
		·······		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

うつつ Well Driller



	E	
SECTION		
TOWNSHIP 185	10112000000000000000000000000000000000	
RANGE 32E	zaminarumumanta	

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STATE ENG	INEER OFFICE
WELL	RECORD

# Annal Contraction

							N			
A) Owner of	well B.]	<u>8. Frizze</u>	11		<u></u>	. <u></u>		's Well No		
		idress P.O.	. HOT I	90 8	8240			-		
-										
Well was drilled										
=							<u>185</u> Ran			
b. Tract N	ło	of Map No.			of the					
e, Lot No	),	of Block No	1.3		of the	Char	parel	. <u>.</u> .		
			<u></u>	fe	eet, N.M. Co	ordinat	system	<u> </u>		Zone i Gran
				· ·	<u> </u>	·····				unun Olain
							License No		· · ·	
ddress P.	O. Box (	637. Hobl	os, New	/ Mexi	<u>co 8</u>	8240				
Drilling Began _	6/1/7	7 Comp	leted	6/	<u>3/77</u> тур	e tools_	Cable	Size of I	10le	8 <u>1</u> _ir
Javatian of Jan	d susface or				at well is		ft, Total depth	of well	133	f1
	XV-1						er upon completion			
Completed well	is the s	hallow 🗀 at	rtesian.		Depti	1 to wate	er upon completion	01 WCH		<b>1</b> 1
			ion 2, PRIN	VCIPAL W	ATER-BEA	ARING S	STRATA	E-tim	ated Y	
Depth i From	n Feet To	Thickness in Feet		Descriptio	on of Water	Bearing	Formation	(gallons		
65	133	68		Sand						
	·									<u>.</u>
	····									
			Section	on 3. REC	CORD OF C	ASING				
Diameter	Pounds	Threads	Depth	in Feet	I	ength	Type of Sho	e (	Perfora	
Diameter (inches)	Pounds per foot	Threads per in.			om	ength (feet)		e Fro	om	То
			Depth	in Fect Botto	om	ength	Type of Sho None	e (	om	
(inches)	per foot	per in.	Depth Top	i in Fect Botto	om	ength (feet)		e Fro	om	То
(inches)	per foot	per in.	Depth Top	i in Fect Botto	om	ength (feet)		e Fro	om	То
(inches)	per foot	velded	Depth Top O	in Feet Botto 1.3	om 1 3	ength (feet) 133	None	e Fro	om	То
(inches) 6 5/8 Depth i	per foot 21 n Feet	verin. Welded Section	Depth Top O on 4. RECO	in Feet Botto 13 PRD OF M	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE	None	e Fro	om	То
(inches) 6 5/8	per foot	velded	Depth Top O Dn 4. RECO	in Feet Botto 13 PRD OF M	om 3 1UDDING /	ength (feet) 133 AND CE	None Menting Metho	e Fro	om	То
(inches) 6 5/8 Depth i	per foot 21 n Feet	verin. Welded Section	Depth Top O on 4. RECO	in Feet Botto 13 PRD OF M	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE	None	e Fro	om	То
(inches) 6 5/8 Depth i	per foot 21 n Feet	verin. Welded Section	Depth Top O on 4. RECO	in Feet Botto 13 PRD OF M	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE	None Menting Metho	e Fro	om	То
(inches) 6 5/8 Depth i	per foot 21 n Feet	verin. Welded Section	Depth Top O on 4. RECO	in Feet Botto 13 PRD OF M	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE	None Menting Metho	e Fro	om	То
(inches) 6 5/8 Depth i	per foot 21 n Feet	verin. Welded Section	Depth Top O on 4. RECO Sac of M	n in Feet Botts 13 PRD OF M Sks fud	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE: 'eet ent	None Menting Metho	e Fro	om	То
(inches) 6 5/8 Depth i From	per foot 21 n Feet To	velded Section · Hole Diameter	Depth Top O on 4. RECO Sac of M	n in Feet Botts 13 PRD OF M Sks fud	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE: 'eet ent	None Menting Metho	e Fro	om	То
(inches) 6 5/8 Depth i From Plugging Contra	per foot 21 n Feet To ctor	velded Section - Hole Diameter	Depth Top O on 4. RECO Sac of M Section	n in Feet Botts 13 ORD OF M Sks fud	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE Peet ent CORD	None Menting Metho	e Fro 65 d of Placement t top	om in the second	To 133
(inches) 6 5/8 Depth i From Plugging Contra Address Plugging Method	per foot 21 n Feet To ctor	velded Section - Hole Diameter	Depth Top O on 4. RECO Sac of M Section	n in Feet Botts 13 ORD OF M Sks fud	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE: Veet ent CORD	None MENTING Cement a	e Fro 65 d of Placement	om in the second	<u>To</u> 133
(inches) 6 5/8 Depth i From Plugging Contra	per foot 21 n Feet To ctor d ed	velded Section - Hole Diameter	Depth Top O on 4. RECO Sac of M Section	n in Feet Botts 13 ORD OF M Sks fud	I I I I I I I I I I I I I I I I I I I	ength (feet) 133 AND CE Peet ent CORD	None MENTING Cement a Depth in f	e Fro 65 d of Placement t top	om in the second	To 133

FOR USE OF STATE ENGINEER ONLY

Date Received June 13, 1977

Quad ______ FWL _____ FSL____

File No. <u>CP-566</u>

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 Use	Dom	Location	No.,	18.	32.4	.14	4

3

	h in Feet	Thickness	Color and Type of Material Encountered
From	To	in Feet	color and Type of Material Encountered
0	<u>'- 2</u>	2	Surface soil
2	26	24	Caliche
26	65	59	Sand-tight
65	91	26	Sand-water
91	107	16	Sand-tight
107	129	22	Sand-water
129	133	4	Sandy clay
	.		
	-		
	1		······
<u> </u>			
		<u> </u>	
	<u> </u>		· · · · · · · · · · · · · · · · · · ·
	 		6.3
		<u> </u>	STATE UN
	• •	Section 7	REMARKS AND ADDITIONAL INFORMATION
		Section 7.	• F m
			FICE 2

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell A. bhott. Driller H.S.

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to be appropriate district office of the State Engineer. A close second se

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		<b>)</b>	ST	ATE ENGI	NEER OFF	ICE	*			
			Section	1. GENER.	AL INFOR	MATION				
Street or	Post Office A	irgil Lin Address Z Fay Hobbs	<u>e L. K</u>	<u>lein.</u>	<u>р.о. в</u> 882	ox 150 41	Ow	ner's Well	No	
Well was drille	d under Permi	t No. CP-	672		and	is located	in the:			
8,	Center o	£ <u>4 SE 4 S</u>	K % of S	ection	7 <u> </u>	wnship	185 F	ange	32E	N.M.
b. Tract	No	of Map No.		c	i the					
		of Block No								
Subdi	vision, record	ed in Le	a		County	•				т С2
		feet, Y=		fee	et, N.M. Co	ordinate S	ystem			Zon
		Abbott Br	os. Dr	illing		· · ·		WD-	-46 .	
									٢٩.	,
		x 637, Ho							1_	
-		2 Comp								¢
Elevation of la	nd surface or			a	t well is		_ ft. Total dep	th of well.	524	
Completed we	ll is 🕰	shallow 🗖 a	rtesian.		Depth	to water	upon completi	on of well	430	
		Sect	tion 2. PRI	NCIPAL W	ATER-BEA	RING ST	RATA			
Depth From	in Feet To	Thickness in Feet		Descriptio	n of Water-	Bearing F	ormation		Estimated dlons per 1	
460	517	57	Sa	Sand						
	1									
L	<u>I</u>		 Secti	on 3. REC						
Diameter	Pounds	Threads		1 in Feet	L	ength	Type of S	hos		ations
(inches)	per foot	per in.	Тор	Botto		feet)			From	To
9 5/8	33	Welded	0	125	1	25			None	
5½	15	Welded	0	527	5	27			459	524
										l
				ORD OF M			ENTING			
Death	То	Hole Diameter		cks Aud	Cubic F of Cem		Met	hod of Pl	acement	
Depth From										
<u>}</u>	1	1		{						
<u>}</u>				1						
<u>}</u>										·
<u>}</u>					20120 22	COPP				
From				ion 5, PLU	GGING RE	CORD				
From Plugging Cont:					GGING RE	CORD	Depth			ibic Fee
From Plugging Cont:	od				GGING RE	[]	Depth Top	in Feet Bottor		ibic Fee Cemen
From Plugging Cont: Address Plugging Meth	od				GGING RE	No.	Contraction of the second s			
From Plugging Conti Address Plugging Meth Date Well Plug	od				GGING RE	No.	Contraction of the second s			
From Plugging Cont: Address Plugging Meth Date Well Plug Plugging appro	od ged oved by:		ineer Repre			No. 1 2 3 4	Тор			
From Plugging Conti Address Plugging Meth Date Well Plug	od ged oved by: 		ineer Repre	sentative E OF STAT	E ENGINE	No. 1 2 3 4 EER ONLY	Тор	Bottor	m of	Cemen

	in Feet	Thickness	Color and Type of Material Encountered
From	То	in Feet	
0	6	6	Top soil
6	21	15	Caliche
21	94	73	Red and brown clay
94	100	6	Grey sand (Water cased off with 9 5/8" pipe)
100	402	302	Red bed with brown & blue streaks
402	456	54	Red clay
456	460	4	Brown clay
460	4.89	29	Sand W/clay streaks (WATER)
489	493	4	Red clay
493	517	24	Sand W/clay streaks
517	524	<u>_</u>	Red Bed
•••••••••••••••••••••••••••••••••••••••		1	
		1	
		1	
		+	
		1	
			- S
	1		7. REMARKS AND ADDITIONAL INFORMATION
		3601101	7. REMARKS AND ADDITIONAL INFORMATION
			No HE
			P A

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Murrell Abbott

INSTRUCTIONS: This foin should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office ctions, except Section 5, shall be answered as completely and accurat When this form is used as a plugging record, only Section 1(a) and Section of the State Engineers possible when any well is drilled, repaired or ded ed be completed.

er er		7	STA	TE ENGIN	EER OFFI	CE				sed June :
				WELL R	ECORD					
				. GENERA		IATION				
(A) Owner of	well	il Linam l	Est. by F Isbad Hwy	aye L. K	line		Owi	ner's Well	l No	• · · · • • • • • • • • • • • • • • • •
City and	Post Office Ad State	Hobi	os, NM 88	240	······					
Well was drilled	under Permit	No	Cp672		and is	located	in the:			
a,	_ ¼ ½		SE ¼ of Se	ction7	Tow	/nship	185 R	ange	32E	N.M.
b. Tract i	No	of Map No		of	the		····			
c. Lot N	0	of Block No		of	the					
Subdiv	vision, recorded	d in	Lea		_ County.					
		_ feet, Y=					System			
(B) Drilling C	ontractor		Larry's	Drilling			_ License No	WD8	382	
Address			2601 W.B	ender, H	lobbs,NM	88240	)			
Drilling Began .	1-228	<u>5</u> Com	pleted1-	<u>29→85</u>	Туре	tools	tricone	Siz	ze of hole_	83/4
Elevation of lar	id surface or			at	well is		_ ft. Total dep	th of well	1_540	
Completed well	is 🐼 s!	hallow 🗀 a	artesian.		Depth	to water	upon completio	on of wel	146	0
-		Sec	tion 2, PRIN	CIPAL WA	TER-BEAR	RING ST	RATA			
Depth i		Thickness in Feet		Description					Estimated allons per :	
From	<u>To</u>			-					<u>-</u>	in in a to y
498	510	12		clay & g	ravel,	small	amt. of sa	infi	12	
		····								
	: 				<b>.</b>					
	_		Sectio	n 3. RECOI	RD OF CA	SING				
Diameter (inches)	Pounds per foot	Threads	Depth Top	in Feet Bottom		ngth eet)	Type of SI	10e	Perfo From	rations To
6578	160PVC		-1	540		41			480	540
L									******	1
	in Feet	Secti Hole	on 4, RECO		DDING AN Cubic Fe	···· ··· ····		and of P	lacement	
[ Depth	То	Diameter	of M	ud	of Cemer	nt				
Erom From										
		f —								
			Sectio	n 5. PLUGO	SING REC	ORD				
From Plugging Contra	.ctor			n 5. PLUGO	DING REC	ORD				
From					31NG REC	ORD No.	Depth i Top	n Feet Botto		bic Fee
From Plugging Contra Address Plugging Metho Date Well Plugg	d					No.				
From Plugging Contra Address Plugging Metho	d				DING REC	No.				
From Plugging Contra Address Plugging Metho Date Well Plugg	d		ineer Repress	entative	· .	No. 1 2 3 4	Top			
From Plugging Contra Address Plugging Metho Date Well Plugg	d ed red by: 	State Eng	ineer Repress		· .	No. 1 2 3 4	Top			
From Plugging Contra Address Plugging Metho Date Well Plugg Plugging approv	d ed red by: 		ineer Repress	entative OF STATE	ENGINE	No. 1 2 3 4 ER ONLY	Top	Botto		Cemen

Depth in	Feet	Thickness	
From	To	in Feet	Color and Type of Material Encountered
0	6	6	b lova es d
6	12	6	gray & while sead
12	16		soft caliche
16		48	brown glay
64	150	86	red elsy
130	120	70	breva aley
220	498	278	red clay with stricks of brown 4 gray clay
498	510	12	acell gravel, brave elsy
510	540	30	brean & red eley
	.		

Section 7. REMARKS AND ADDITIONAL INFORMATION

fea STATE ENGINEER ROSTELL, NM œ 8 37 AM °85

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller M Ð

	· .	
INSTRUCTIONS: This for uld be executed in	triplicate preferably	typowrittan and submit
	minutere, prefetably	typewritten, and submittees
of the State Engineer. An even s, except Section	5, shall be answere	as completely and accurate
drilled, repaired or deepened when this form is used	as a physical and d	
er heer the second seco	as a prugging record,	only Section I(a) and Sectime

appropriate district office possible when any well is need be completed.

				WELL	NEER OFF RE <b>COR</b> D			9	Revised June i
	R.	11 1.			AL INFOR				
(A) Owner of Street or	well	dress							0. ////
City and	State	nalja	new JY	2. Va					
Well was drilled									
<u>a. SE</u>	4 560 1/4	NE 4	E 14 of Se	ction	<u>//</u> To	wnship	<u>185</u> R	lange <u>3</u> .	2 <u>E</u> N,M,P
b. Tract	No	of Map No	•		of the				
c. Lot N	0	of Black No.			of the				
Subdiv	rision, recorded	1 in			County	•			
		_ feet, Y=		fe			System		
the	-	Par	7.1	2.					
(B) Drilling C	Contractor	- Ang	- <i>j LLR</i> \	m			License No		
Address	TT Oble	-h.	$\mathcal{D}_{i}$	, ,					-1.
Drilling Began .	9/3/91	Com	pleted _9/2	3/9/	Тур	e tools 🖉	Colary_	Size (	of hole $\frac{5/4}{4}$
Elevation of lar									100
Completed well		nallow 🗔							Dry
completed well	.us LI 81								
Depth	in Feet	Sec Thickness	stion 2. PRIN					Es	timated Yield
From	То	in Feet		Descriptio	on of Water-	Bearing F	ormation		ons per minute)
						<b>-</b>			
					<u> </u>	·			
							· · · · · · · · · · · · · · · · · · ·		·····
		l							
				<u></u>	ORD OF C.		r	<u> </u>	Darfonting
Diameter (inches)	Pounds per foot	Threads per in.	Depth Top	in Feet Botte		ength feet)	Type of S	hoe	Perforations From To
				Į			L		
ç			ion 4, RECO			~~~~~	ENTING		
Depth From	in Feet To	Hole Diameter	Sacl of M		Cubic F of Cem		Met	ihod of Plac	ement
					~				
				·					
			Sectio	m 5. PLU	GGING RE	CORD			
Plugging Contra	actor								
		······································				No.	Depth		Cubic Feet
						1	<u> </u>	Bottom	or cement
Plugging Metho Date Well Plugg	red by:					23			
Plugging Metho	•								
Plugging Metho Date Well Plugg		State En	gineer Repres	entative		4	()		
Plugging Metho Date Well Plugg		State En			TE ENGINE		Y		

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		Section 6. LOG OF HOLE	
Depth in Feet From To	Thickness in Feet	Color and Type of Material Encountered	
		Λ	
	1	Sand	
20 34	16	Sand - Some gravel	
36 42	- 4		
42 70	28	sand, some gravel, red clay	
70 79	G	red clay, some gronel	
79 85	- 6	Dand	
85 94	4 9	Sand and granel	
94 100	o 6	ned claim	
·			
	· · · · · · · · · · · · · · · · · · ·		
		N Mala	
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Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Jany Driller / 0

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All section 5, shall be answered as completely and accurately possible when any well is drilled, repaired or deepened this form is used as a plugging record; only Section 1(a) and Section be completed.

• . • *	Ą	D	ST	ATE ENGINE WELL RE				Revised June 19
					INFORMATIC			
(A) Owner o Street or City and	f well T Post Office Ac State	X O Pro Idress C/O Box 692	d. Glenn's Tatum,	New Mexi	Vell Serv Lco 8826	vice, Inc. 07	ner's Well No	
•	d under Permit					ed in the:		
a	_ ¼ <u>₩</u> 3 ½	4 <u>NW</u> %	<u>NW</u> ¼ of S	ection 26	Township	<u>18-S.</u> R	ange <u>32-</u> 3	E. N.M.P.
b. Tract	No	of Map No.	·		10			
c. Lot N	0	of Block No		of th	1e			<u>,</u>
	vision, recorde							
						e System		
(B) Dritling	Contractor G1	enn's Wa	ter Wel	<u>l Servi</u>	e	License No	WD 42	L
Drilling Began	5/9/85	Comj	pleted	5/9/85		Rotary	Size of i	hole 7.7/8;
Elevation of la	nd surface or _				ell is		h of well_70	00
Completed wel		hallow 🗆 a				er upon completic		
completed in	· · · · · · · · · · · · · · · · · · ·			ICIPAL WATS	ER-BEARING	-,		
}	in Feet	Thickness	· · · · · · · · · · · · · · · · · · ·		Water-Bearing			asted Yield
From	<u> </u>	in Feet					(galions	s per minute)
				WW Hole	·····			······
			·	)ry Hole	· · · · · · · · · · · · · · · · · · ·			
ļ							1	
		1						
					,			
Diameter	Pounds	Threads		on 3. RECORI	OF CASING			Perforations
Diameter (inches)	Pounds per foot	Threads per in.			O OF CASING Length (feet)	Type of Sh	ice Fro	
			Depth	in Feel	Length	Type of Sh	108	
			Depth	in Feel	Length (feet)	Type of Sh	108	
			Depth	in Feel	Length (feet)	Type of Sh	108	
(inches)	per foot	per in.	Depth Top on 4. RECO	In Feet Bottom	Length (feet)		108	
(inches)		per in.	Depth Top	in Feet Bottom RD OF MUDI	Length (feet)	MENTING	108	om To
(inches)	per foot	per in.	Depth Top on 4. RECO Sac of M	In Feet Bottom	Length (feet)  DING AND CE Cubic Feet of Cement	MENTING	ICOB Fro	om To
(inches)	per foot	per in.	Depth Top on 4. RECO Sac of M	In Feet Bottom	Length (feet)  DING AND CE Cubic Feet of Cement	MENTING	ICOB Fro	om To
(inches)	per foot	per in.	Depth Top on 4. RECO Sac of M	In Feet Bottom	Length (feet)  DING AND CE Cubic Feet of Cement	MENTING	ICOB Fro	om To
(inches)	per foot	per in.	Depth Top on 4. RECO Sac of M with s	In Feet Bottom	DING AND CE Cubic Feet of Cement mud	MENTING	ICOB Fro	om To
(inches)	per foot	per in. Section Hole Diameter S pluged	Depth Top on 4. RECO Sac of M with B Sectio	in Feet Bottom RD OF MUDI ks (C lud (C eand and on 5. PLUGGI	DING AND CE Cubic Feet of Cement mud	MENTING	Ioe Fro	om To
(inches) (inches) Depth From Plugging Contra Address Plugging Metho	per foot	per in. Section Hole Diameter	Depth Top on 4. RECO Sac of M with s Section	in Feet Bottom RD OF MUDI ks (C lud (C eand and on 5. PLUGGI	DING AND CE Cubic Feet of Cement mud	MENTING	Ioe Fro	om To
(inches) (inches) Depth From Plugging Contra Address	per foot	per in. Section Hole Diameter	Depth Top on 4. RECO Sac of M with s Section	in Feet Bottom RD OF MUDI ks (C lud (C eand and on 5. PLUGGI	Length (feet)  DING AND CE Dubic Feet of Cement mud	MENTING Meth	106 Fro	om To
(inches)	per foot	per in. Section Hole Diameter Spluged	Depth Top on 4. RECO Sac of M with s Section	in Feet Bottom RD OF MUDI ks (C lud (C eand and on 5. PLUGGI	Length (feet)	MENTING Meth	106 Fro	om To
(inches)	per foot	per in. Section Hole Diameter Spluged	Depth Top on 4. RECO Sac of M With B Section	in Feet Bottom RD OF MUDJ ks (C) and and on 5. PLUGGI	Length (feet)  DING AND CE Dubic Feet of Cement mud NG RECORD	MENTING MENTING Meth Depth ir Top	106 Fro	om To
(inches)	per foot	per in. Section Hole Diameter Spluged	Depth Top on 4. RECO Sac of M With B Section	in Feet Bottom RD OF MUDI ks C bud c eand and on 5. PLUGGI	Length (feet)	MENTING MENTING Meth Depth ir Top	ice Fro	om To To

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Depth	in Feet	Thickness	
From	To	in Feet	Color and Type of Material Encountered
0	12	12	sand-loose
12	_24	12	clay
24	47	23	caleche
47	58	11	sand
58	84	26	Sandy clay
84		18	red clay sticky
102	_116	<u> </u>	Sand and gravel
116	142	26	red clay sticky
142	315	173	brown clay
		10	purple_clay
325	378	53	red_clay
	408	30	pink red clay
408	440_	32	brown shale and blue streaks
<u> </u>	500	60	brown shale-grainey
500	530	30	sand rock_fine
530	545	15	brown_shale
545	605	.60	fand_rock=medium
	616	11	hrown shale
616	-675	59	····
		25	
i,		Section 7. R	EMARKS AND ADDITIONAL INFORMATION
			88 E E E E E E E E E E E E E E E E E E
			H.
			5
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		. 4	
			•
he undersigned escribed hole.	l hereby certi	fies that, to the bes	it of his knowledge and belief, the foregoing is a true and correct record of the abo
			Linky thim
			Driller

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				WELL RE	LUND			
			Section	I, GENERAL	INFORMATIO	N		
	· · · · 11		al Corpora			Owner's	Well No	
<ol> <li>Owner of Street or</li> </ol>	well Post Office Ac	Idress 535	7 East Pir	na St.		Owner's	wen 140.	
City and	State	Tuc	son, AZ 🚷	35712	<u></u>			
'ell was drilled	l under Permit	No0	-13-002		and is locate	d in the:		
a. <u>NE</u>	_ % <u>_ NW</u> %	4 <u>NW</u> 4	NW ¼ of Se	ection <u>32</u>	Township _	18 S Range	32 E	N.M.P.
b. Tract	No	of Map N	0,	of t	he			
	o vision, recorde							
				feet,	N.M. Coordinate	System		
		Boyles	Bros.			License No		
					ake City, U			
rilling Began	1100 213 1	<u> </u>	npleted		Type tools		_ Size of hole_	1
~ ~							3060	
~ ~						ft. Total depth of	3060	<b>`</b>
~ ~	nd surface or _				vell is		2060 well	) f
levation of lar	nd surface or _	hallow 🗖	artesian.	at w	Depth to wate	ft. Total depth of r upon completion of	2060 well	) f
levation of lar ompleted well	ıdisurfaceor⊥ Lis □ si	hallow 🗖 Se	artesian. ection 2. PRIN	at w	vell is	ft. Total depth of r upon completion of	2060 well	) f
levation of lar ompleted well Depth i	ıd surfac¢ or l is □ s in Feet	hallow 🗖	artesian. ection 2. PRIN	at w	Depth to wate	ft. Total depth of r upon completion of TRATA	2060 well	) f f f 
levation of lar ompleted well	ıdisurfaceor⊥ Lis □ si	hallow 🗖 St Thickne	artesian. ection 2. PRIN	CIPAL WAT	Depth to wate ER-BEARING S	ft. Total depth of r upon completion of TRATA	2060 well Well Estimated	) f f f 
levation of lar ompleted well Depth i From 274	ıd surfac¢ or l is □ s in Feet	hallow 🗖 St Thickne	artesian. ection 2. PRIN ss	at w ICIPAL WAT Description o	Depth to wate ER-BEARING S	ft. Total depth of r upon completion of TRATA	2060 well Well Estimated	) f f f 
levation of lar ompleted well Depth i From	ıd surfac¢ or l is □ s in Feet	hallow 🗖 St Thickne	artesian. ection 2. PRIN ss TF	at w ICIPAL WAT Description o	Depth to wate ER-BEARING S	ft. Total depth of r upon completion of TRATA	2060 well Well Estimated	) i i Y ield
levation of lar ompleted well Depth i From 274	ıd surfac¢ or l is □ s in Feet	hallow 🗖 St Thickne	artesian. ection 2. PRIN ss TF	at w ICIPAL WAT Description o	Depth to wate ER-BEARING S	ft. Total depth of r upon completion of TRATA	2060 well Well Estimated	) i i Y ield
levation of lar ompleted well Depth i From 274	ıd surfac¢ or l is □ s in Feet	hallow 🗖 St Thickne	artesian. ection 2. PRIN ss TF TF	at w iCIPAL WAT Description o iC	Depth to wate ER-BEARING S	ft. Total depth of r upon completion of TRATA	2060 well Well Estimated	) f f f 
levation of lar ompleted well Depth i From 274	ıd surfac¢ or l is □ s in Feet	hallow 🗖 St Thickne	artesian. ection 2. PRIN ss TF TF Section	at w iCIPAL WAT Description o iC	rell is Depth to wate ER-BEARING S of Water-Bearing	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	) i i Y ield
levation of lar ompleted well Depth i From 274 575	I is sin face or I is sin Feet To	hallow Se Thickne in Feet	artesian. ection 2. PRIN ss TF TF Section	at w iCIPAL WAT Description o iC IS IS	rell is Depth to wate ER-BEARING S of Water-Bearing	ft. Total depth of r upon completion of TRATA	2060 well Estimated (gallons per f	) f
levation of lar ompleted well Depth i From 274 575 Diameter	nd surface or l is	hallow So Thickne in Feet	artesian. ection 2. PRIN ss TF TF Section Depth	at w iCIPAL WAT Description o iC IS in 3. RECOR in Feet	cell is	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	) f
levation of lar ompleted well Depth i From 274 575 Diamcter (inches)	nd surface or l is	hallow So Thickne in Feet	artesian. ection 2. PRIN ss TF TF Section Depth Top	at w ICIPAL WAT: Description o IC IS m 3. RECOR in Feet Bottom	cell is	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	) f
levation of lar ompleted well Depth i From 274 575 Diameter (inches) 7	I is surface or I is sin Feet To Pounds per foot	hallow So Thickne in Feet	artesian. ection 2. PRIN ss TF TF Section Depth Top O	at w iCIPAL WAT Description o iC iS in 3. RECOR in Feet Bottom 20	cell is	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	) f
levation of lar ompleted well Depth i From 274 575 Diameter (inches) 7	I is surface or I is sin Feet To Pounds per foot	hallow Standard	artesian. ection 2. PRIN ss TF TF Section Section Depth Top 0 0	at w ICIPAL WAT: Description o IC IS IN 3. RECOR in Feet Bottom 20 1195	cell is	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	) 1 Yield minute)
levation of lar ompleted well Depth i From 274 575 Diameter (inches) 7	nd surface or	hallow Standard	artesian. ection 2. PRIN ss TF TF Section Depth Top 0 0 0 0 tion 4. RECO	at w ICIPAL WAT: Description o IC IS In 3. RECOR in Feet Bottom 20 1195 RD OF MUD	Depth to wate ER-BEARING S of Water-Bearing D OF CASING Length (feet)	ft. Total depth of r upon completion of TRATA Formation	2060 well Estimated (gallons per f	Y ield minute)

Depth i	n Feet	Hole	Sacks	Cubic Feet	Method of Placement
From	То	Diameter	of Mud	of Cement	
1195		5 7/8		10	Displacement
1					

#### Section 5. PLUGGING RECORD

Plugging Contractor Boyles Bros.				
Address 1624 Pioneer Rd, Salt Lake City,U		Depth	in Feet	Cubic Feet
Plugging MethodDisplacement	No.	Тор	Bottom	of Cement
Date Well Plugged June 22, 1977	1	0	2040	165
Plugging approved by:	2			
famer Ottan	3			
( / State Engineer Representative	4			

			FOR USE OF STATE ENGINEER ONLY
Date Received	July 20,	0, 1981	

_____ FWL _____ FSL__ Quad _____

File No. 0-13-002

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3-	002	
-		

Use EXP Location No. 18.32.32.111244

Depth ir	Feet	Thickness	Section 6. LOG OF HOLE
From	То	Thickness in Feet	Color and Type of Material Encountered
-			
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Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This fg chould be executed in triplicate, preferably typewritten, and submitted stions, except Section 5, shall be answered as completely and accurate of the State Engineer. A drilled, repaired or deepen When this form is used as a plugging record, only Section 1(a) and Section Theed be completed.

appropriate district office possible when any well is

# SECTION TOWNSHIP 185 RANGE 33E

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# STATE ENGINEER OFFICE WELL RECORD

Section 1. GENERAL INFORMATION

____ ¼ _____ ¼ ___ ¼ ___ ½ of Section ___ 4 ___ Township ___<u>185</u> Range ___<u>33E</u>____N.M.P.M.

____ County.

____ Zone in

___ Grant.

___ Owner's Well No. ____

;

(B) Drilling C	ontractor	ubose Dr	illing	Inc.		License No	WD-1107	
Address 5407	N. Gold	ler, Ode	ssa, Te	xas 7976	4			
Drilling Began .	5-8-91	Comp	leted 5-1	0-91	_ Type tools _r	erun	Size of hole <u>1</u>	<u>2 3/4</u> in.
Elevation of lar	nd surface or _		<u>,</u>	at we	ll is XXX	ft. Total depth	of well 250	ft.
Completed well	tis 🗔 si	hallow 🗖 a				upon completion	of well <u>absen</u>	1 <b>t</b> ft.
		Sect			R-BEARING ST	RATA		
Depth		Thickness	Ţ	Description of	Water-Bearing F	omation	Estimated	
From	То	in Feet		seren bring of	water bom mg r	ormation	(gallons per r	ninute)
			AB	SENT				
	·		Section	n 3. RECORD	OF CASING			
Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Sho	Perfo	rations
(inches)	per foot	per in.	Тор	Bottom	(feet)		From	То
			······································					L
		Sectio	on 4. RECOI	RD OF MUDD	ING AND CEM	ENTING		
Depth From	in Feet To	Hole Diameter	Sack of Mu		ubic Feet f Cement	Metho	d of Placement	
- FTOIN	10	Diameter					÷	
			<u> </u>					
			<u>-</u>					
			L			····		

#### Section 5, PLUGGING RECORD

Plugging Contractor Dubose_DrillingInc.				
Address	No.	Depth	in Feet	Cubic Feet
Plugging Method Back fill withcuttings	NO,	Тор	Bottom	of Cement
Date Well Plugged 5-10-91	1			
Plugging approved by: Ken Fraquez	2			
	3		1	
State Engineer Representative	4			

Date Received May 16, 1991

File No....

(A) Owner of well Oxy USA Inc.

Subdivision, recorded in ____

а. _

b. Tract No,____

the ____

Street or Post Office Address <u>PO Box 56250</u> City and State <u>Midland</u>, <u>Texas</u> 79710

Well was drilled under Permit No. <u>CP-758 Exploratory</u> and is located in the:

c. Lot No._____ of Block No._____ of the____

of Map No. _____ of the _____

d. X= ______ feet, Y=_____ feet, N.M. Coordinate System_____

FOR USE OF STATE ENGINEER ONLY

Quad ____

CP-758-Exploratory EXP __ Use __ _____ Location No. <u>18.33.4.34233</u>_____

____ FWL ______ FSL___

	in Feet	Thickness	Color and Type of Material Encountered
From	To	in Feet	
<b>\$</b>	5		Surface soil
<u> </u>	32	27	caliche
2	50	18	
<u>50</u>	_65	15	clay and shale conclomerate purple and g
65		25	prown clay with rgrey stringers
-90	120	30	rad bad
120	190	70	Brown clay
190	195	5	- color change to light brown clay
195	250 230	55	-brown clay
			-no water, back fill hele with cutsings
	<u></u>		
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			······
			and a second
		-	
27-11012-7140-			
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	• -		기 _] 
		Section 7	REMARKS AND ADDITIONAL INFORMATION
			10 <b>46</b>
The undersigne described hole.		tifies that, to the	best of his knowledge and belief, the foregoing is a true and correct record of the a
			Driller
			Driller

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			******						
		6							Revised June 1972
		and the second s	STAT	re engin	NEER OFFIC	E			
			1	WELL A	RECORD			247 - A	1 da da
			Section 1	CENED 4	AL INFORMA	TION		FII	ED ENGR. (
	B	J. Wool					d & Grav	e]	
Street or	Poet Office Ad	Idram Box	776					St's Well No	·····
City and	State <u>Eu</u>	nice, Ne	w Mexico	8823	<u>1</u>				
Well was drilled	under Permit	No. CP-54	.6		and is l	ocated in	the:		
a se <del>l</del> a <u>ne</u>	12 NEW	SEIA	14 of Sec	tion	9 Town	whin 1	8-S P.		N.M.P.M.
		[°]							
c. Lot No	),	of Block No d in	Теа	0	of the				
		feet, Y=			et, N.M. Coord	dinate Sy			Zone in Grant.
		-							(munt.
		W. L. V					•		
Address	Box 74	Oil Cen	ter, Net	w Mexi	<u>ico 8826</u>	6			
Drilling Began .	June 1,	1975 Com	pleted Ju	ne 3,	<u>197</u> 5ype to	ools	Spudder	Size of l	nole10_in.
Elevation of lar									<del>90</del> ft. 70ft.
Completed well	is 🗋 s	hallow 🛄 i	artesian,		Depth to	o water u	pon completio	n of well	ft.
		Sec	tion 2. PRIN	CIPAL WA	ATER-BEAR	ING STR	ATA	··· <b>T</b>	
Depth From	in Feet To	Thickness		Description	n of Water-Be		ated Yield per minute)		
70	85	15	- Pi	no wat	ter sand				· · · · · · · · · · · · · · · · · · ·
		<u> </u>		110 Wal					
L				- 2 DEC	ORD OF CAS	INC			
Diameter	Pounds	Threads			Len		Type of Sh		Perforations
(inches)	per foot	per in,	Тор	Botto	m (fe	et)		Fr	om To
6 5/8"	welde	ed	0	90	90		none	7	0 85
		+	· · · · · · · · · · · · · · · · · · ·						
l	L	<u> </u>		I	• ]			L	I
Denth	in Feet	Sect Hole	ion 4. RECO		UDDING AN Cubic Fee				
From	To	Diameter	of M		of Cemen		Meti	od of Placen	nent
				[					
					··· ·				
		·   ··· · ·							
<u> </u>		1						· · · · · · · · · · · · ·	
			Sectio	n 5. PLU	GGING REC	ORD			
Plugging Contr									
Address Plugging Metho						No.	Depth i Top	n Feet Bottom	Cubic Feet of Cement
Date Well Plug	ged					1	100	Bottom	. comon
Plugging appro	ved by:					2			
		State En	gineer Repres	entative	E	4		·····	
				OF STAT	re enginee	R ONLY			
Date Received	Octobe	r 2, 197	'8		Quad		171377		FSI
				•		•	PWL	33	FSL 42241 ?#/
File No					0.017		-	10 00 0	19919

Depth	in Feet	Thickness	Color and Type of Material Encountered
From	To	in Feet	Color and Type of Material Encountered
0	5	5	top soil
5	30	25	caliche
30	65	35	brown sand rock
65	70	5	hard rock
70	85	1.5	fine water sand
85	90	5	red bed.
			L S Elev $3978$ Depth to K Trc_ $31$ Elev of K Trc_ $3293$
			Loc. No. <u>18.33.9. 42241</u> Hydro. SurveyField Check_ <u>FB</u>
			SOURCE OF ALTITUDE GIVEN
			Interpolated from Topo. Sheet X
			Determined by Inst. Leveling
V			Other
			· · · · · · · · · · · · · · · · · · ·

Section 7. REMARKS AND ADDITIONAL INFORMATION

1970 OCT -2 AM 8: 27 STATE ENGLAEER GUILD DEVENTI LU ROTATILLILLILA.

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The undersigned here by certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

W. L. Nun Daug Driller

INETRUCTIONS: This for pould be executed in triplicate, preferably typewritten, and submitted the appropriate district office of the State Engineer. An except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deepened when this form is used as a plugging record, only Section 1(a) and Section a need be completed.

•						<b>U</b>	×	Revised June
•			V	VELL REC	ORD			
		_			NFORMATION			
(A) Owner of Street or	Post Office A	ddress <u> </u>	<u>Glenn's</u>	Water	Well Serv	ice, Inc.	ner's Well No.	
City and 1	State <u>BOX</u>	<u>692 Tatul</u>	<u>n, N.M.</u>	88267	<u> </u>			
Well was drilled								
a,	4 <u>SE</u> 1	4 <u>NW %</u>	SW14 of Sect	ion <u>11</u>	Township <u>1</u>	<u>8-S.</u> R	lange <u>33-</u>	EN.M
b. Tract l	No	of Map No.		of the	·			
c. Lot No Subdiv	)	of Block No d in		of the	3			
					-	<b>a</b>		_
the	······	leet, 1			.M. Coordinate	System		Zo G
(B) Drilling C	ontractor <u>G</u>	lenn's Wa	ater Well	<u>l Servi</u>	ce, Inc.	License No	WD 42	1
Address	Box 692	Tatum, 1	N.M. 88;	267	·			
Drilling Began .	10/21/8	<u>6</u> Comp	leted _10/2	21/86	_ Type tools	Rotary	Size of	hole 9.7/
Elevation of lan	d surface or _	~		at we	II is	ft. Total dep	th of well 1	00
Completed well	is 🖾 s	hallow 🗔 a	rtesian.		Depth to water	upon completi	on of well	
		Sect	ion 2. PRINC	IPAL WATE	R-BEARING ST	RATA		
Depth i From	n Feet To	Thickness in Feet	De	scription of	Water-Bearing F	ormation		mated Yield is per minute)
52	82	30		nevol				
				raver				
	·	<u></u>						
					····			
I1		L	Section	2 050000	OF CASING		1	······
Diameter (inches)	Pounds per foot	Threads	Depth in	Feet	Length	Type of Si	hoe	Perforations
6 5/8	.150	per in.	Top	Bottom	(feet)		i II	rom Te
				•- <u>-</u> •			5	0 90
		.L			l			
Depth i	n Feet	Sectio Hole	on 4, RECORI Sacks	· · · · · · · · · · · · · · · · · · ·	ING AND CEM			
From	To	Diameter	of Mud		Cement	Met	hod of Placen	nent
<b> </b>								
	<u> </u>	· · · · · · · · · · · · · · · · · · ·						
	· · · · ·				I			
			Section	5. PLUGGIN	G RECORD			
Plugging Contra Address					<b></b>	<b>R</b> 4 1	- P	
Plugging Method Date Well Plugg	ſ				No.	Depth i Top	n Feet Bottom	Cubic Fee of Cemer
Plugging approv					1			
		State Engi	neer Represen	tative	<u>3</u>			
•	Oatobor	27, 1986	FOR USE O	F STATE EN	GINEER ONL	Y		
	occoper	-27, 1900						
Date Received		-		Quad		FWL		

and the second second

	th in Feet	Thickness . in Feet	Color and Type of Material Encountered
From	To		
0	22	2	<u>soil</u>
2	24	22	calecche
_24	52	28	sand
	82	30	gravel
82		18	red clay
	<u></u>		
<b>.</b>			
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		<u> </u>	
		Section 7	REMARKS AND ADDITIONAL INFORMATION
		-	
			Cr.
			63
			٣٣ ٣
			· · ·
he undersign escribed hole	ned hereby certi e.	fies that, to the	best of his knowledge and belief, the foregoing is a true and correct record of the above
			In the form
· ,			Driller
STRUCTIC	- NS: This form	should be available	ed in triplicate, preferably typewritten, and submitted to propriate district office action 5, shall be answered as completely and accurated submitted when any well is

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L	ت ج			INEER OFFICE				
Ľ			WELL	RECORD		•	-	
				RAL INFORMATION				
	veli <u>Heyc</u> ost Office Ad tate	dress U/ U U	rvey Yates lenn's Wate x 692 Tatum	r Well Servic N.M. 88267	Owner's We e, Inc.	ell No		
/eli was drilled t	under Permit 1	NoCP-	701	and is located i	n the:			
a	4 <u>E</u> 4	<u>NW 4</u> S	W 14 of Section	11 Township	<u> 18-S.</u> Range	33-E.	N.M.P.M	
b. Tract N	0,	of Map No.		of the				
				. of the				
				-				
			f	eet, N.M. Coordinate S				
8) Drilling Co	ntractorG	<u>lenn's M</u>	ater Well S	ervice, Inc.	License NoW	D421		
ddress	Box 692	Tatum,	<u>New Mexico</u>	88267	**************************************			
rilling Began _	<u>10/20/86</u>	Comp	leted 10/20/8	6 Type tools	Rotary	Size of hole_	9 <u>7/8</u> in	
levation of land	surface or			at well is	ft. Total depth of w	eli 100		
ompleted well i	-	atlow 🗔 a			upon completion of w			
		Sect	tion 2. PRINCIPAL V	WATER-BEARING ST				
Depth in From	Feet To	Thickness in Feet		ion of Water-Bearing Fo		Estimated Yield (gallons per minute)		
54	84	30	grave	1		40		
						40		
							·	
L		L	Section 3, RE	CORD OF CASING	<u>.                                 </u>			
Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top Bott	Length	Type of Shoe	Perfo From	rations To	
6 5/8	. •156				<u>.</u>	50	90	
					·······	1	1	
		Section	on 4. RECORD OF I	MUDDING AND CEMI	INTING		•	
Depth ir From	r Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement		Placement		
						· ·		
			Section 5 PL	UGGING RECORD				
				No.	Depth in Feet Top Bot		ubic Feet f Cement	
late Well Plugge lugging approve			<u> </u>	1				
	,	State Eng	ineer Representative					
		···	FOR USE OF ST	TE ENGINEER ONLY		·		
			FOR USE OF STA	THE BROWNED OF D.				
Jate Received	Octobe	er 27, 198	6	Quad		FSI		

Depth i		Thickness in Feet	Color and Type of Material Encountered
From	То		
0	2	2	soil
2	22	20	caleche
22	54	34	sand
54		_30	gravel
84	100	16	red clay
	····		
	- AF		
	•		· · · · · · · · · · · · · · · · · · ·
	• •		
			······································
		}	
	1		
<u>l.</u>	l	Section 7	REMARKS AND ADDITIONAL INFORMATION
			C
			د نین ونین
			· · · · ·
			·
The undersioned	herebu naviifi	as that to the b	test of his knowledge and belief, the foregoing is a true and correct record of the
described hole.	were of actual	va mai, 10 ma (	
-			Circles, John Driller
ر م			• Driller

	1	5						6	Revised	June 1972
			STA		VEER OFF	ICE				
				WELL R	ECORD			EIELI	) <u>F</u> R	er. Lo
	7	l Maalau	Section 1	. GENERA	AL INFOR	MATION				
A) Owner of	[we]]	P. WUDLEY	.0.Box 2	07			Owner	's Well No		
City and	Post Office Add State	H	obbs, NM	88240						
	under Permit N	fo <u>L-8</u> :	288		and i	s located :	in the:			
							g Ranj			ммрм
							-			
c. Lot No Subdiv	o o vision, recorded	f Block No in		o	f the County					
					_					
							ystem			
B) Drilling C	ontractor	Lav	ry's Dri	lling			License No	(III) & & ?		
							40			
Drilling Began .	5-11-82	Comp	eted	5-11-82	Тура	e toolsb	utton bit	Size of h	ole	9_7/§n
Elevation of lar	d surface or			a	t well is		ft. Total depth	of well79	,	ft.
Completed well	is 🏹 sha	allow 🗆 ar	tesian.		Depth	to water	upon completion	of well _60		ft.
			ion 2. PRIN			RING ST	RATA			
Depth	in Feet	Thickness						Estim	ated Y	ield
From	To	in Feet			n of Water-	Bearing F	ormation	(gallons	per m	nute)
60	80	20	50	nd 8 gr	<i>avel</i>			60	<u>.</u>	
							I			
Diameter	Pounds	Threads			DRD OF CA				Perfora	tions
(inches)	per foot	per in.	Тор	Bottor		feet)	Type of Sho	B Fro		То
6 5/8	160PVC	:	<del>\$</del> 1	79		80		XX	60	79
······										
	,I			<u> </u>						
Depth	in Feet	Sectio	n 4. RECO	T	JDDING A Cubic F					
From	To	Diameter	of M		of Ceme		Metho	d of Placem	ent	
· ·										
I			l			(				
			Sectio	n S. PLUC	GING RE	CORD				
	actor									
Plugging Metho	d					No.	Depth in l Top	Feet Bottom		oic Feet Cement
Date Well Plugg Plugging approv	;ed /ed by:		·	-		1 2				
- oping appilo		State E!	naar Da	n tativ-		3				
. · · ·		State Engl	neer Repres	cittative		4				
. • · · ·										
Note Degring J		o/	FOR USE	OF STAT	E ENGINE	ER ONL	Y			
Date Received	September	24, 1982					Y FWL _		FSL_	

Depth in From	To	Thickness in Feet	Color and Type of Material Encountered
0	2	2	blow sand
2	15	13	caliche
	59	44	sand
		nf of	
		20	gravel
79	80	1	gray yellow clay
			•
			<u> </u>
			L S Elev
			Elev of KTrc. <del>??//4</del>
			Loc. No. 5312.232
			Hydro, SurveyField Check 4.5
			SUBACE OF AUTITUDE GIVEN
	<u> </u>		Interprinted from Topo. Shost X. Interprint to the topology of topolog
			Other
	·····		
			·
<u></u>			
			4
·		Section ?	7. REMARKS AND ADDITIONAL INFORMATION
			$\begin{array}{c} \mathbf{C}_{1} \\ \mathbf{D}_{2} \end{array}$
			200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200
			· · · · · · · · · · · · · · · · · · ·
The undersigned	hereby certi	fies that, to the	e best of his knowledge and belief, the foregoing is a true and correct record of the ab
described hole.		,,	V 7
			Laury Elking
-		4	Driller

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Form WR-23



STATE ENGINEER OFFICE



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# WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

ection 1			(	A) Owne	r of well_	<u></u>		111ng (bran	
T									411Å
									iov-liox100
							•		is located in the
			-						Rge
									nse No.
							iauco - avuz Sost Sachio		136 110
			,						Hew Hoxico
		Ì							
					as comulo	tod	Nov 20		
(P!	lat of 640	acres)	T warner	ummig w	-	1090	•		10-98
levation	1 at top o	f casing i	n feet	above sea	levelum			th of well	2015
									tion <u>250</u>
									20y7 4
ection 2					CIPAL WA	ATER-BEAR	ING STRATA		
No	Depth i From	n Feet To		kness in Feet		De	scription of Water	-Bearing Formatic	n
	FIOM	10	'		, , ·			<b>-</b>	
1	150	205	ļ,	55	Waton	-sands			
2									
3			}				· · · · · · · · · · · · · · · · · · ·		
4						÷.			
5						•	· · ·		
	······································	L		_					
ection 3	\$ 		- 1			D OF CA		25	
Dia in.	Pounds ft.	Threa	្រ	Der Top	Bottom	Feet	Type Shoe	From	orations
				-				150	Dod
6	20			0	205	205	<u> 110108</u>	4.212	205
				<u>_</u>		···· • ·			
	}						<u> </u>		
	1	<u> </u>	1	<u>.</u>		t		I	
ection 4	L			RECOR	D OF MUI	DDING AN	ID CEMENTING		
Depth	n in Feet	Diam	eter	Tons	No. Sa	icks of		Methods Used	
From	To	Hole in	ı in.	Clay	Сеп	nent		Methods Osed	
								· ·	·
	-							and the second	
								TRIV	100
								<u></u>	
			[					1	1055 L
			(						3 1925
			(			JING REC			9 1955
	Pluggin				<u> </u>			License N	FICE
lame of treet ar	Plugging Plugging	er				City		License M GROUND W Statzosweu,	FICE
lame of treet ar 'ons of (	Plugging nd Numb Clay used	er		I'ons of R	oughage	City	Ту	License A CROUPS A Stateosmith pe of roughage	FICE
ame of treet ar ons of (	Plugging nd Numb Clay used	er		I'ons of R		City	Ту	License M GROUND W Statzosweu,	FICE

Basin Supervisor	140.	From	То	NU. DI SACKS CAEL
FOR USE OF STATE ENGINEER ONLY Date Received $\frac{29}{955}$		-		
File No. <u>L. 28174</u> Use Oil	<u> </u>	L	ocation No.	14.33.12. 140
5-0. 	. <u>S</u>			44 51

50	etior	16

LOG	O۶	WELL

Section 0							
Depth in Feet		Thickness in Feet	Color	Type of Material Encountered			
From	To	in reet					
Q	10	<u>10</u>	white.	- Callions and rook			
.10	40						
_lu)	80	io		- dry send			
80	160		white	- coarse sai			
160	200/	uo	-rod	weter cande 7			
200	205	5		0183			
				4089 /			
				L S Elev 200. Depth to KTrc 200. Elev of KTrc 3889			
				Inc. No. 18.33,12, 44/12.24			
				Hydro. Survey Field Check X			
				SOURCE OF ALTITUDE GIVEN			
				Interpolated from Topo. Sheet X			
			[	Determined by Inst. Leveling			
				Other			
			1				
		•	1				

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Maude Lature Well Driller

# STATE ENGINEER OFFICE WELL RECORD

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_____.



FIELD	ENGR.	106
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		-			INFORMATION		•-	ENGR. L
(A) Owner of Street or F	ost Office Add	tress P.O.	Box 207	r				
•							<del></del>	
					and is located			
a	. ¼ ¼	<u>NW 14 NU</u>	1_ ¼ of Sec	tion <u>13</u>	Township1	8S Ran	ge <u>334</u>	N.M.P
b. Tract N	o	_ of Map No		of th	1e			
					ıe			
Subdivi	sion, recorded	ín	lea	·	County,			
					N.M. Coordinate S			
		Larry's	Drilli	ng	Hobbs, NM	(	VD882	
(B) Drilling Co Address	ontractor		Bender	i	Hobbs, NM			
			ted 5-	10-82	Type tools	hutton hít		
							8	2
					ell is		6	0
Completed well	is 🖾 sh	allow 🗆 arte	sian.		Depth to water	upon completion	of well	
			n 2. PRINC	PAL WAT	ER-BEARING ST	RATA	· · · · · ·	
Depth in From	To	Thickness in Feet	D	escription o	f Water-Bearing F	ormation		ted Yield per minute)
70	80	10	sau	rd & grav	vel		4	0
			1					-
			+					
<u>.                                    </u>		<b>_</b>	Section	3. RECOR	D OF CASING			
Diameter (inches)	Pounds per foot	Threads per in.	Depth i Top	n Feet Bottom	Length (feet)	Type of Sho	e Po From	erforations n To
6 5/8	160PVC		+1	82	83		70	
		·				, ,		
				<b></b>		<del></del>		
	- Vact				DING AND CEMI	ENTING		, _, _, _, _, _, _, _, _, _, _, _,
Depth i From	To	Hole Diameter	Sack of Mu		Cubic Feet of Cement	Metho	d of Placeme	nt
	·····							
<b> </b>					·· · · · · ·			
			Section	1 5. PLUGG	ING RECORD			
							Engt 1	0.11 2
Plugging Method	1				No.	Depth in Top	Bottom	Cubic Fee of Cemen
Date Well Plugge Plugging approv			<u> </u>		1 2			
		State Engine	er Represe	ntative				
······				<u> </u>	4			
Date Received	Sentembe	er 24, 1982	FOR USE (		ENGINEER ONL'			
	~~ĥrc∺tre	, 1902		Oue	d 107.2.0	FWL _		ESL
	CP-623			Qu.				

	in Feet	Thickness	Color and Type of Material Encountered		
From	То	in Feet	Contra and Aller or second second		-
0	6	6	blow sand		
		·			
6	11	5	caliche		
11	70	59	sand		
70	80 <u>8</u> 7	10XXX	gravel & sand		
80	82	2	red bed		
			2939		
			L S Elev 3989 Depth to K frc		
			Elev of KTrc_ <u>3909</u>		
	<u> </u>	<b>├──</b>			
			Loc. No. 18. 33. 13. 11112 Hydro. SurveyField Check FB	- <b>.</b>	
			Hydro, Survey Field Check FB		
	 	-			
			SOURCE OF ALTITUDE GIVEN		
			Interpolated from Topo. Sheet		
		- <i>-</i>	Determined-by Inst. Leveling		
			Other		
····					
		<u>}</u>			
					-
	ļ				
			· · · · ·	<u> </u>	
	<u>.</u>	1			
	· _ · · · · ·	<b>├</b> ────────			
		1			
	· · · ·	<u> </u>			
	· · · ·				
		Section 7	. REMARKS AND ADDITIONAL INFORMATION		
		÷ -			
		. • ·			
				en Co	
				т. Г.	
				<b>.</b>	
				C.	

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller, pro targ be

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. Alternative problem is used as a plugging record, only Section I(a) and Section we be completed. of the State Engineer. Af possible when any well is

			ST	ATE ENGINI	EER OFFICE		<b>p</b> .	
				WELL RE	CORD			
			Section	I. GENERAI	. INFORMATIC	N		
(A) Owner of Street of City and	Post Office A	ddress C/O	Glenn's 2 Tatum,	Water N.M. 8	Well Serv 8267	ice, Inc.	er's Well No	
Well was drille	d under Permi	it No	CP-	689	and is locat	ed in the:		
a	_ ¼	4 <u>NE</u> 4	<u>NW</u> % of s	ection <u>13</u>	Township	<u>18-5.</u> Rai	nge <u>33-</u>	<u>E. n</u> .
b Tract	No	of Map 1	No	of	the			•
c. Lot≯	ło,	_ of Block N	0		the			
			·		-			
d. X=		feet, Y=_		feet,	N.M. Coordinat	e System		7
(B) Drilling	Contractor	Glenn	's Water	Well S	ervice	License NoW	D_421	
Address B	ox 692 1	'atum, N	.M. 8826	7				
Driffing Began	12/7/85	; c.	mpleted 12	/7/85		rotary	Size of I	hole 97
Elevation of la	nd surface or				well is	ft. Total depth	of well	100
Completed we	llis 🎦	shallow 🛄	artesian.		Depth to wat	er upon completion	of well	
			Section 2, PRI	NCIPAL WAT	ER-BEARING			
Dep th From	in Feet To	Thickn in Fee		Description	of Water-Bearing	Formation		ated Yield
70	95	2	5	grave	əl		1.20	
							1	
L			Secti	un 3, RECOR	D OF CASING		<b>4</b>	
Diameter (inches)	Pounds per foot	Threads per in,	Deptl Top	in Feet Bottom	Length (feet)	Type of Sho	ie	Perforation
102'	.142	steel					6	
			Ŭ	•				
						•		
ł	<b>.</b>		etion 4. RECC	DRD OF MUI	DING AND CE	MENTING		
Depth From	in Feet To	Hole	Sac	ks	Cubic Feet of Cement		od of Placem	ent
								<b>-</b>
								<u>-</u>
<u> </u>			·   · · ·					
L	l	. I	l	]				
Plugging Contr	actor				ING RECORD			
Address	··· ·					Depth in		Cubic F
Phugging Metho Date Well Plug	ged					Тор	Bottom	of Cem
Plugging appro	ved by:	· ·						
		Stofa lí	ngineer Repres	SOUTHTING	4			

A Normal Street, Stree

1	Į		
	t		

			Section 6.3 OF BOLL	
Depth	in Feet	Thickness	Color and Type of Material Encounter	ad .
From	То	in Feet	Coror and Type of Material Encounter	
0	5	5	sand	
5	29	24	caleche	
29	65	<u> </u>	sand	
	95		gravel	
95			yellow clay	
				<u> </u>
· <u></u> .				
·····				
*********				
				·····
				· · · · · · · · · · · · · · · · · · ·
				·····
				<u> </u>
				DEC 13
<u> </u>	l	Section 7	. REMARKS AND ADDITIONAL INFORMATION	31 HH 185
				ß

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Æ, 9.2 Dritter

INSTRUCTIONS: This for of the State Engineer. All drilled repaired or deepened

A be executed in triplicate, preferably typewritten, and submitted transferences, except Section 5, shall be answered as completely and accurately as a function this form is used as a plugging receively only Section 1(a) and Section 5. It

ropriate district office ssible when any well is be completed.

STATE	ENG	INEER	OFFICE
			-

N.M.P.M.

Zone in

Grant.

_ ft.

____ ft.

. Owner's Well No, _

wd882

____ FWL ______ FSL____

33e

·..-

Size of hole <u>97/8 in</u>. 115

	. •	WELL RECORD	
(A)	Owner of well Street or Post Offic	Section 1. GENERAL INFORMAT KMR, INC. e Address P.O.BOX 1832 HOBBS, NM 88240	ION Owner's W
Weil		mit No. <u>CP-769-EXPLORATORY</u> and is loca W 14 <u>NW</u> 14 <u>NE</u> 14 of Section <u>13</u> Townshi	
	b. Tract No.	of Map No of the	
		of Block No of the orded in County.	
	d. X=	feet, Y= feet, N.M. Coordin	ate System
(B)	Drilling Contractor	LARRY'S DRILLING, INC.	
Add	ress	2116 W. BENDER HORRS NM	88240
Drill	5-6-92 ing Began	Completed Type tool	S BUTTON BIT

at well is..... ft. Total depth of well. 🕅 shallow 🗖 artesian. Depth to water upon completion of well _____ 70___

# Section 2. PRINCIPAL WATER-BEARING STRATA

Depth i	n Feet	Thickness		Estimated Yield
From	To	in Feet	Description of Water-Bearing Formation	(gailons per minute)
80	115	35	SAND & SANDSTONE	20

#### Section 3. RECORD OF CASING

	Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfo	rations
	(inches)	per foot	per in.	Тор	Bottom	(feet)	Type of anoe	From	To
	6 5/8	160pvc		0	115	115	_	90	110
ļ								+	
- [					t			1	

-		Section	4. RECORD OF	MUDDING AND CEMEI	NTING
Depth in Feet		Hole	Sacks	Cubic Feet	
From	То	Diameter	of Mud	of Cement	Method of Placement
				***	
	l <u></u> ,		-	1	

### Section 5. PLUGGING RECORD

Plugging Contractor					
Address			 Depth	in Feet	Cubic Feet
Plugging Method		No.	Тор	Bottom	of Cement
Date Well Plugged		1			
Plugging approved by:		2			† · · · · ·
	DALAS Englished Barris and Al	3			1
	State Engineer Representative				

May 21, 1992 Date Received

File No ....

Completed well is

Elevation of land surface or _

FOR USE OF STATE ENGINEER ONLY

Quad .___ CP-769-Exploratory ____ Use ___ EXP ____ Location No._____ 18.33.13.21142___

(THIS WELL WILL NOW BE CP-72-A - TO BE USED FOR COM USE) 18.83. C. 2//72

			Section 6. LOG OF HOLE
Depth From	in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	12	12	SAND
12	21	9	CALICHE
21	36	15	SAND & GRAVEI
36	52	16	RXXXXAN SAND, RED & GRAY CLAY
52	66	14	RIO SAND & SOME CLAY
66	85	19	and the second
85	110	25	SAND & SOME GRAVEL
110	110	05	SAND & GRAVEL
, • .		<u> </u>	
<u></u>	<u> </u>		
<u></u>			
<u></u>	1		
<u></u>	+	+	β
		-	
<u></u>	<u> </u>	Section	7. REMARKS AND ADDITIONAL INFORMATION
		section	7. REMARKS AND ADDITIONAL INFORMATION
			меха 10
			7. REMARKS AND ADDITIONAL INFORMATION ELC. NEW ROTE ROTE NOT THE ROTE ROTE ROTE ROTE ROTE ROTE ROTE ROT
The second		4)5100 Ab-4 4- 14	ne best of his knowledge and belief, the foregoing is a true and correct record of the above
described hole		mes mat, to th	to best or ins knowledge and benef, the foregoing is a fire and concertection of the above
			Janony Destan

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All points, except Section 5, shall be answered as completely and accurate possible when any well is drilled, repaired or deepen on this form is used as a plugging record, only Section 1(a) and Section 2 d be completed. Form WR-23



STATE ENGINEER OFFICE



WELL RECORD INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, renaired or deepened. When this form is used as a plurging

Section			(A) Own	er of well	Sch	rbauer Catt	le Company	
			Street an	d Number.	Box	1471		
			City			Midland,		X& S
	M	<u>a</u>	Well was	drilled un	nder Pern	nit No.L-6347.	and	is located in the
	Y	90.					Twp. 185	
			M02				ito Licens	
			Drilling	was comm	enced	July 11,		19 68
L			Drilling	was comple	eted	11y 12,		19.68
	Plat of 640					•		
							th of well 17	
State w	hether we	ll is shall	ow or artesian	Shall	0₩	Depth to wat	er upon completi	on 130
Section	2		PRI	CIPAL W	ATER-BEAR	ING STRATA		
	Depth i	n Feet	Thickness in			conintion of Wate-	Rooming Pro	
No.	From	То	Feet		De	service of water-	Bearing Formation	
1			}	[]		old well.		
-2						OTO MOTT'		
3								
4				-				
5	]							
· · · · · ·			]	1				
Section	3			RECOR	D OF CA	SING		
Dia	Pounds			pth	Feet	Type Shoe	Perfora	tions
in	ft.	in	Top	Bottom		Lype Ende	From	То
6	10			.	[			
					 <u>.</u> .	<u> </u>	1	
Section	4		RECO			ID CEMENTING		
	h in Feet	Diame		No. Sa				
From	To	Hole in			ient		Methods Used	
	+							
						· ······		
			·····	• •   • • • •				
<u> </u>								
•	•	1			1		····	
lection	5			PLUGO	GING REC	ORD		
lame o	f Plugging	g Contract	tor				License No	
							State	
ons of	Clay used	····		loughage u	used	Тур	e of roughage	
							ged	
	g approved					-	were placed as i	
					-	Depth of Phy		

		No.	Depu	i or Piug	No. of Sacks Used
	Basin Supervisor		From	To	NO. OI BACKS OBEC
	การการการการการที่สารหลายการการการการการการการการการการการการการก				
FOR USE (	P STATE ENGINEER ONLY				
Date Received					
oo daalaa ka k	JUL 22 1968				
	· ·· OFFICE				4127
File No <u>L-6347</u>	GROUND WATER & JFERVICOR ROSWELL, NEW MEXICO	S	le T	opetion No	18.33.1.2.440
FIC NOR ANALY					
	1				

Depth in Feet       Thickness in Feet       Color         From       To	Type of Material Encountered
Image: Section of the section of th	d out-old woll.
Image: Section of the section of th	
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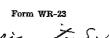
The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

R Maslewhit

Ados



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STATE ENGINEER OFFICE

# WELL RECORD



INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

.

Street and Number Star Route B.	
City Hobbs	State New Mexico
Well was drilled under Permit No. 1-3454	and is located in the
NE 4NE corner 4 of Section 30	Twp. 18 S Rge33 E
(B) Drilling Contractor . Musslewhite	License No.W D 99
Street and Number. P.O. Box 56	
City Hobbs	State New Mexico
Drilling was commenced March 29	
Drilling was completed March 30	19 57
-	City Hobbs Well was drilled under Permit No. I.=3454 N.E. 4/N.E. common 4/4 of Section 39 (B) Drilling Contractor R. Musslewhite Street and Number. P.O. Box 56 City Hobbs Drilling was commenced March 29

Elevation at top of casing in feet above sea level.... 100 State whether well is shallow or artesian shallow _____ Depth to water upon completion_____ 35

Section	2	
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PRINCIPAL WATER-BEARING STRATA

No.		in Feet	Thickness in	Description of Water-Bearing Formation
INO.	From	To	Feet	beactions of water-beating formation
1	70	97	27	Red sand and sand rock
2				
3				
4				
5				

Section 3					RD OF CAS	SING		,
Dia	Pounds	Threads	Depth		Feet	Type Shoe	Perforations	
in.	ft.	in	Top	Bottom	ECC.	Type Sube	From	То
678	20	none	0	100	100	none	75	100
					<u> </u>			
			ļ					
			1	1				1

Section 4

#### **RECORD OF MUDDING AND CEMENTING**

Depth	in Feet	Diameter	Tons	No. Sacks of	
From	To	Hole in in.	Clay	Cement	Methods Used
					······································
:					
	I	1	1		

## PLUGGING RECORD

Name of Plugging Contractor		License No	
Street and Number	City	State	
Tons of Clay used	_Tons of Roughage used		
Plugging method used		Date Plugged	
Plugging approved by:		Cement Plugs were placed as fol	lows:

# Cement Plugs were placed as follows:

Basin Supervisor	No.	Depth From	of Plug To	- No. of Sacks Used
FOR USE OF STATE ENGINEER ONLY				A 17
Date Received				A23.17
			Calify Conference on the second	CIPITCE COCUND WAR POWERS
File No. <u>6-3454</u> Use Dom.				To. 18.33.30. 220

Section 8	. •	

3

Depth in Feet T		Thickness				
C.From	1 ^{To}	in Feet	Color Brown	Type of Material Encountered Soil		
1	25	24	White	Cleachie and rock		
25	50	25	Grey	Sandy shale		
50	97	47	Red	Sand and sand rock		
7	100	3	Brown	Quartsite		
			l	L S Elev Depth to KTrc		
				Depth to KIrc Etev of KTrc		
	-					
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		+				
		1				
				1		

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

P. Dueller Well/Driller



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