Structural mapping of the Edwards Aquifer in eastern and central Uvalde County, Texas, using seismic, well and outcrop data

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(AAPG CPG #4538, Tx.Lic.Geol. #1320)

For Public Release

Work Performed for the Edwards Aquifer Authority

June, 2005

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STRUCTURAL MAPPING OF THE EDWARDS AQUIFER IN EASTERN AND CENTRAL UVALDE COUNTY, USING SEISMIC, WELL AND OUTCROP DATA

REPORT OF WORK PERFORMED UNDER CONTRACT WITH THE EDWARDS AQUIFER AUTHORITY

Thomas E. Ewing, Frontera Exploration Consultants; May 24, 2005

Project History and Objectives

In October, 2003, the Edwards Aquifer Authority engaged Frontera Exploration Consultants, in particular Dr. Thomas E. Ewing its senior geoscientist, to interpret licensed seismic data, integrate the data with available well control, and prepare a structure map of the Edwards Aquifer in the Knippa Gap area of eastern and central Uvalde County (Figure 1).

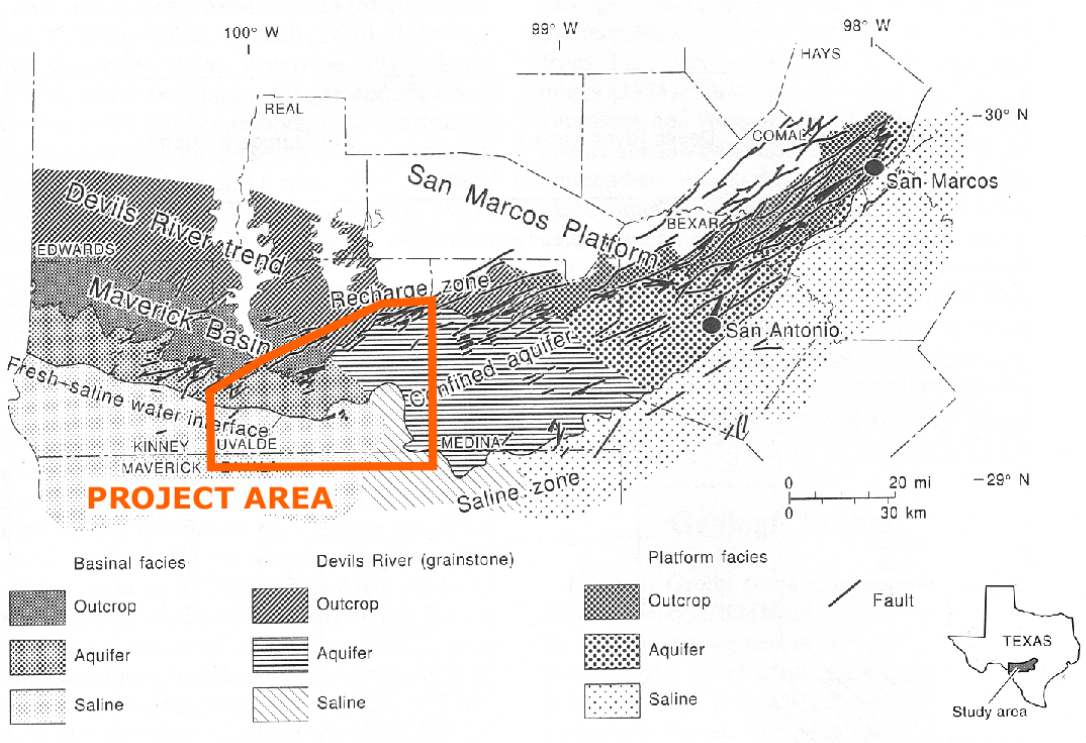

Figure 1 – Location of the mapping project, with respect to the Edwards confined aquifer and the 'Knippa Gap'. Modified from Collins and Hovorka (1997).

Better understanding of the 'Knippa Gap' constriction in the Edwards Aquifer, and of flowpaths from western Uvalde County eastward towards Medina County, are a high priority for Aquifer research. An important part of the constriction, lying south of Old Sabinal Road near and east of the Frio River, has little well control. This area

contains the apparent downdip limit of fresh water through the constriction, and is key to understanding flowpaths. Fortunately, a sparse network of 2D seismic reflection data was acquired by the oil and gas industry in and near this key area. Interpretation of this data, integrated with all available well and outcrop control, can yield a much more complete and more reliable intepretation of fault patterns and depths to the Edwards Group in the area.

The seismic reflection lines were acquired for deep exploration targets within the Paleozoic Ouachita thrust belt. However, modern acquisition techniques provide enough fold and coverage at shallow depths that the structural configuration of the aquifer can be mapped.

Seismic Data Licensed

Seismic Exchange, Inc. provided a stick map of available seismic data in Uvalde County. From this, Ewing and Johnson selected six lines for quality check. The criteria for quality check were: location, short group and shot intervals, short near-trace offset, digital recording, shallow mute on the final display section, continuity of recording (lack of skips) and visible image quality in the shallow Cretaceous section. These criteria were selected to maximize the imaging of the shallow Edwards section and the underlying Sligo/Pearsall reflector on the existing data, as well as to allow reprocessing of the seismic data to better image the shallow reflectors.

Based on the quality check of Nov. 25, 2003, five lines were selected for licensing, their parameters and shotpoint lengths are listed in Table 1 (Appendix). The lines chosen were all acquired in the 1990s, with high fold and small group intervals – these parameters ensure that the shallow Cretaceous structure (400-3000') can be imaged. Line extents were chosen with regard for features of geologic interest and budget constraints. Licensing negotiations were carried out by Steve Johnson for the Authority. After extensive legal review to ensure confidentiality, the data were received by the Authority in late August, 2004. Only the top 1.25 seconds of the data was licensed. Display tapes were requested, but in the end were not available. Some field tapes have been received.

Well and Outcrop Data Used

To interpret the seismic reflection lines and map the structural configuration of the aquifer, it was necessary to integrate all available well data. This information (Table 2, Appendix) was derived from three main sources:

1. The database of wells used by the Bureau of Economic Geology in constructing their regional map of the top of the aquifer was provided by Sue Hovorka. This source supplied 183 data points, all in Uvalde County.
2. The oil and gas well database in Uvalde County was researched at Balcones Energy Library. Special emphasis was placed on the deep tests which reached the

Sligo, to tie the deeper reflectors on the seismic data; but all well records which reached or neared the Edwards were used. This source yielded 60 data points in Uvalde County (9 overlaps with BEG data). In adjacent Medina, Zavala and Frio counties, an additional 23 wells provide regional coverage.

3. The WIID database of water wells, maintained as a Website by the Texas Department of Water Resources, provided many additional wells. Many of these wells included aquifer and other formation tops. Where no geologic information was provided, the depth to which casing was set was used as a proxy for the base of Del Rio clay, concurrent with the usual practice for Edwards water wells. This source yielded 80 additional data points.

All well locations were entered into a GIS database maintained in a Kingdom seismic system at Frontera's headquarters. The GIS was also loaded with topographic maps supplied from TNRIS, and with regional outcrop mapping from the BEG and from the USGS. Well locations were cross-checked, and some inconsistencies were noted and corrected.

Interpretation Process

All seismic interpretation was performed on paper sections, due to the lack of display tapes from the vendor. The paper sections could be digitized, but this was not in the budget of the present project.

All wells located near (within 1/2-mile) of the seismic lines were plotted on the sections, and tops noted. Velocity control in the area is sparse; I used a velocity survey from the Humble #1 E.E. Wilson in Medina County, combined with examination of the stacking velocities reported on the seismic sections. Three key reflectors were identified: the top of Austin (visible only in the most downdip parts of the grid), the Del Rio / Edwards (visible over approximately half of the grid), and the Pearsall / Sligo (visible over the entire grid).

A time-structure map was prepared on the Pearsall/Sligo reflector to identify the main structural features (Figure 2). Because of the sparse grid, a strike of approximately N60°E was assumed for all major faults. This trend is consistent with those faults that can be definitely correlated from line to line. Faults with apparent displacement down to the east or south (regional) were colored blue on the map, and faults with apparent displacement down to the west or north (counter-regional) were colored red. A major red fault forms the northwest boundary of a horst block visible across the western half of the grid.

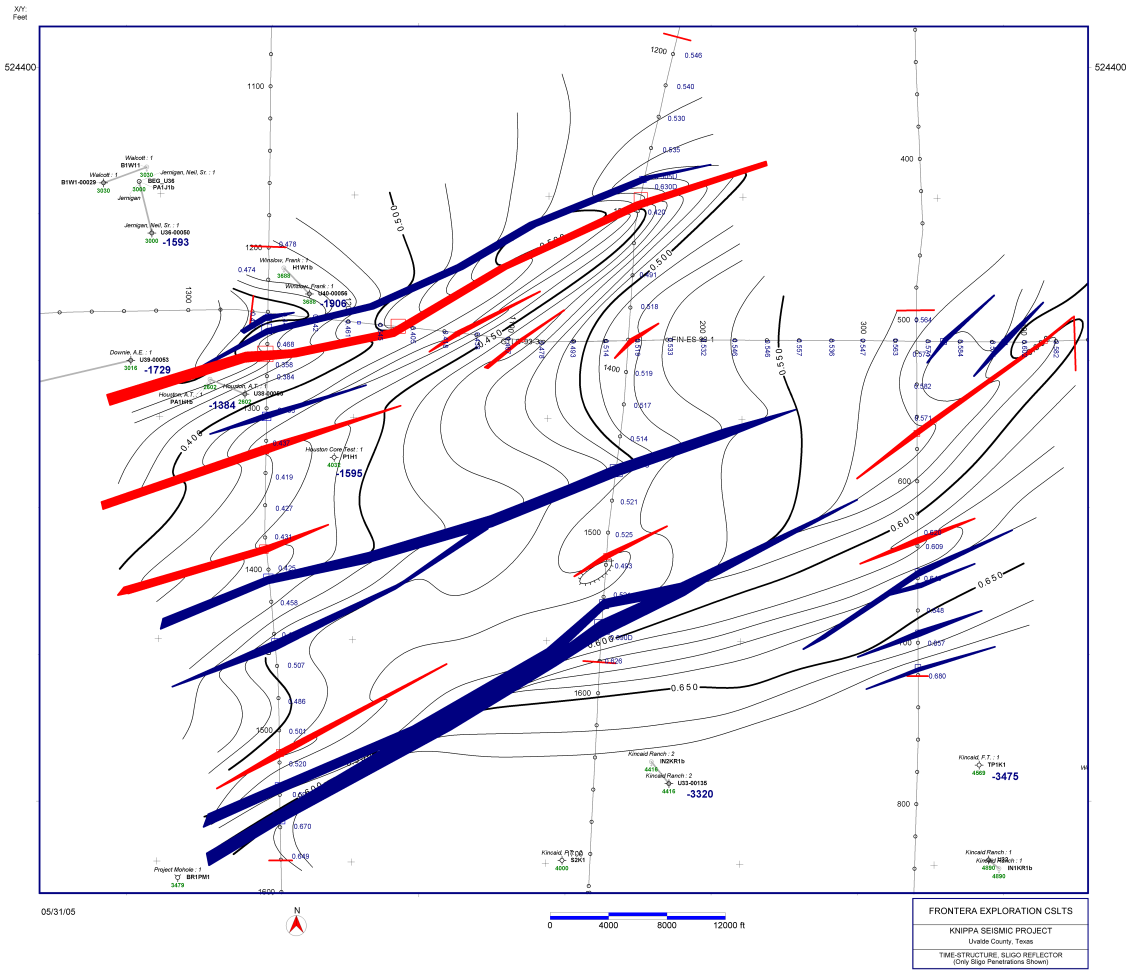

Figure 2 – Time-structure map on Sligo reflector, derived from the seismic grid with limited well control.

After the Sligo map was completed, a structure map was prepared on the top Edwards Group (base Del Rio) reflector, integrating all subsurface data points, outcrop information, seismic reflectors, and upward continuation of the Sligo map. The Sligo-Edwards interval thickens only gradually from north to south, and is estimated at 2000-2500 ft in the study area. Assuming the major structures at Sligo and Edwards levels are concordant, Sligo fault cuts and fault blocks may be continued up to the shallow Edwards in areas where the Edwards is not directly imaged. Again, a fault strike of about N60°E is assumed unless well data indicate otherwise. Seismic times on top Edwards Group were converted to depth using a regression of four well – seismic ties.

The resulting structure map was then compared in detail with outcrop mapping and previous structural maps. Exposed or inferred contacts between the Del Rio, Buda, Eagle Ford, and Austin formations were used to refine the contouring (shallower formations cannot be used due to marked unconformities and stratigraphic variation). Final smoothing and generation of the published map were performed using Canvas 9 software.

Summary of Results

The final map (Figure 3) covers the area from Uvalde east to the Medina County line, and from the Zavala County line northward to the Edwards outcrop. Contouring was also carried westward to the Kinney County line and southward into northernmost Zavala County to tie well control.

The map is a significant revision of the previous structural mapping, as it incorporates nearly double the control points and five seismic lines.

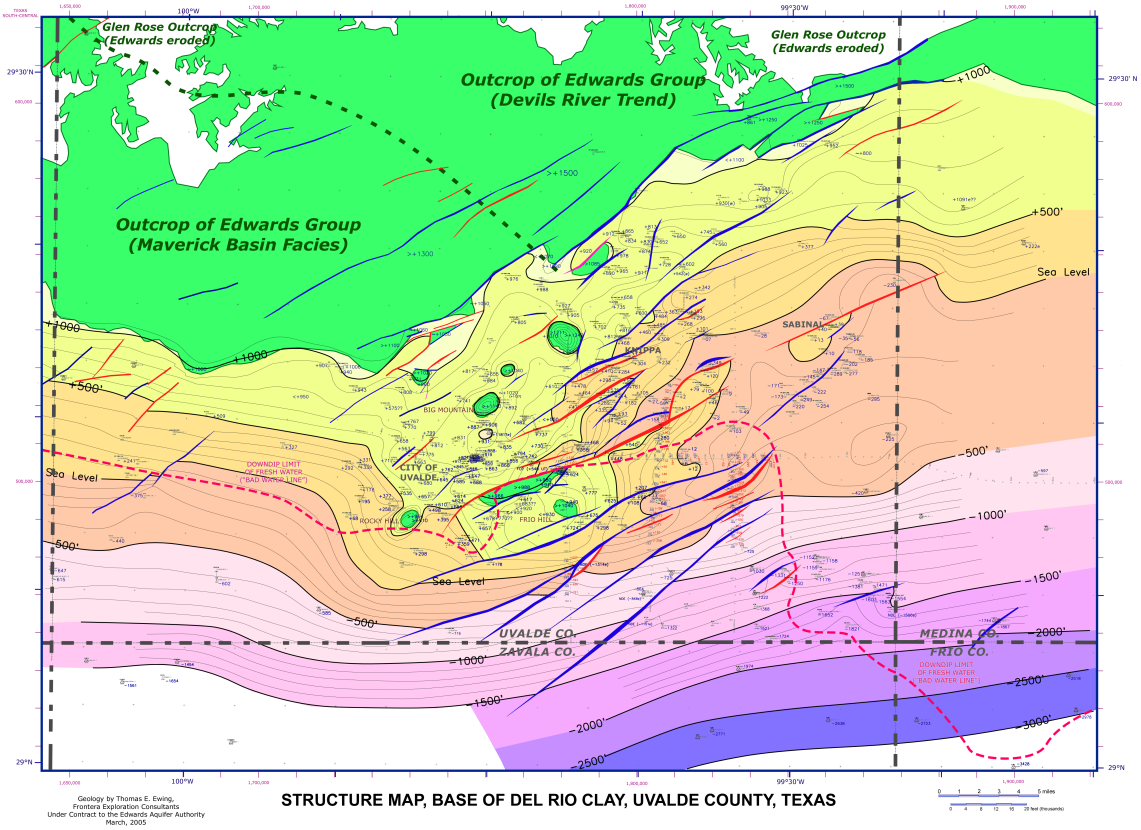

Figure 3. Final map, Structure on Base Del Rio (Top Edwards Group). Data from all well penetrations shown, and from five seismic lines.

A few major features may be noted:

- The Uvalde Salient or Uvalde Arch is a southeast-trending high passing just northeast of Uvalde townsite through Big Mountain and Frio Hill. This high is cut by numerous Balcones (northeast-trending) faults. However, the arch itself is likely to be a Late Cretaceous feature, coincident with the 80-million year igneous activity in the area.
- Several large northwest-down counter-regional (red on the map) faults occur across and northeast of the Uvalde Arch. The largest, the Agape Ranch Fault (Agape fault of Clark and Small, 1997) crosses the Frio River southeast of Black Waterhole and continues northeast, dying out

southwest of Uvalde. The fault has over 400 ft of displacement; it may in part localize the 'bad-water line' in the area. The upthrown side exhibits a narrow ribbon of very high elevations, which fall off to the southeast. Well data indicate at least two other similar horst blocks to the northwest in the Knippa area. A north-south cross section (Figure 4) shows these narrow horst blocks.

- Large southeast-down regional faults (more than one zone, perhaps en echelon; blue on the map) occur southeast of the Agape Ranch Fault, dropping the Edwards to over 2000' depths (Figure 4).
- Many Balcones faults are also closely associated with antithetic faults (sense of throw opposite to the main fault), which cause 'holes' of anomalously deep Edwards on the downthrown side of major faults (either red or blue). The major Balcones faults extend into the Paleozoic 'basement' and can be correlated from Sligo to Edwards levels, as shown on Figure 4. The antithetic faults, however, may not extend through the entire Mesozoic section.

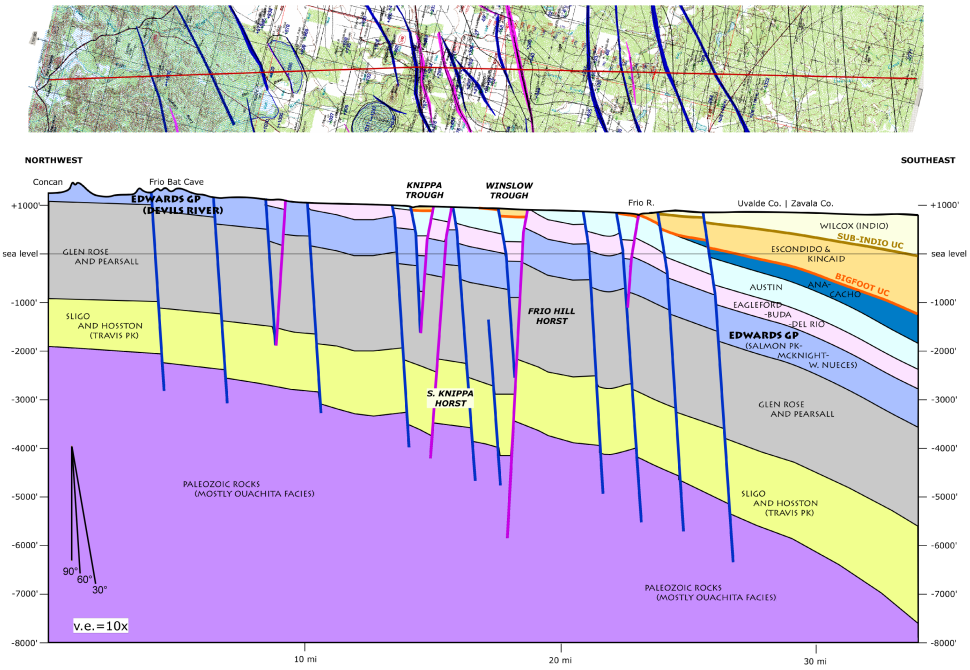

Figure 4. – Line drawing showing the interpreted Top of Edwards Group and other horizons across the east side of the Uvalde Arch (in the Knippa Gap area). In part derived from a north-south seismic line, extended with well data.

- Several prominent 'bullseyes' on the Uvalde Arch are domes in the mapping horizon, mostly with outcropping Salmon Peak (upper Edwards Group) limestone. These overlie laccoliths of late Cretaceous intrusive rock that have intruded a deeper level (the McKnight Formation?) and bowed up the overlying strata. There are also numerous occurrences of igneous rocks in outcrop and shallow subsurface (as indicated by USGS magnetic data). Most or all of these appear to be volcanic centers, which

are concentrated at the Austin/Anacacho or Austin/Escondido contacts (consistent with the dominant age of 80 million years). At the Edwards level, volcanic centers are represented by their feeder systems, small dikes or plugs, which are probably not resolvable. They are therefore not shown on the present map. The seismic data also show the general continuity of reflectors beneath the numerous magnetic anomalies.

- The nature of the Knippa groundwater constriction is not fully determined from the structural data. Recent piezometric data supplied by the Edwards Aquifer Authority shows that the potentiometric cascade lies just west and south of Knippa townsite. This zone overlies the zone of complex regional and counterregional faulting on the northeast side of the Uvalde Arch (Figure 5). My speculation is that the high-relief, narrow horst blocks channel flow to the northeast across stratigraphic changes related to the margin of the Maverick Basin. Such changes are discussed in the work of Hovorka and others (1996).
- The 'bad-water line' as presently drawn lies along the Agape Ranch Fault for part of its length, then trends somewhat south of the fault in its eastern extension. Oddly, surface outcrops of Salmon Peak in the Frio Hill horst are shown as lying on the saline side of the 'bad water line'. The salinity anomalies mentioned by Schulz (1994) are probably related to the structural complexity of the area, but their extent and significance remain to be determined.

Potential for Future Work

Although the present map is the most inclusive to date for the Knippa Gap area, it can be improved and extended in many ways:

- There are additional wells that would help to refine the contouring. These non-WIID data can be found in the EAA and USGS files.
- Water chemistry and water-level data need to be systematically fitted into the better-resolved structural picture.
- The seismic data which EAA licensed contain considerably more useful information than can be gained from the paper sections of the present processing. A small amount of this data could be obtained by scanning and digitizing the sections for computer interpretation. Much more information can be released from reprocessing the grid with emphasis on the shallow reflectors (the original processing was designed for Paleozoic targets). I would expect substantial improvement in imaging, higher frequency, better fault definition and increased ability to map the shallow Edwards target.
- Neither well data nor the sparse 2D grid can truly resolve the fault pattern in this complex area. Mapping has required an assumption of fault strike. This

assumption is probably good for the major faults, but less good for the small ones. Further improvement must come either from drilling more wells or from geophysical investigations. Possibilities for geophysical work include:

- High-resolution 2D seismic in a tighter grid
- High-resolution 3D seismic over key areas
- 2D and 3D electromagnetic surveys, ground or helicopter support
-

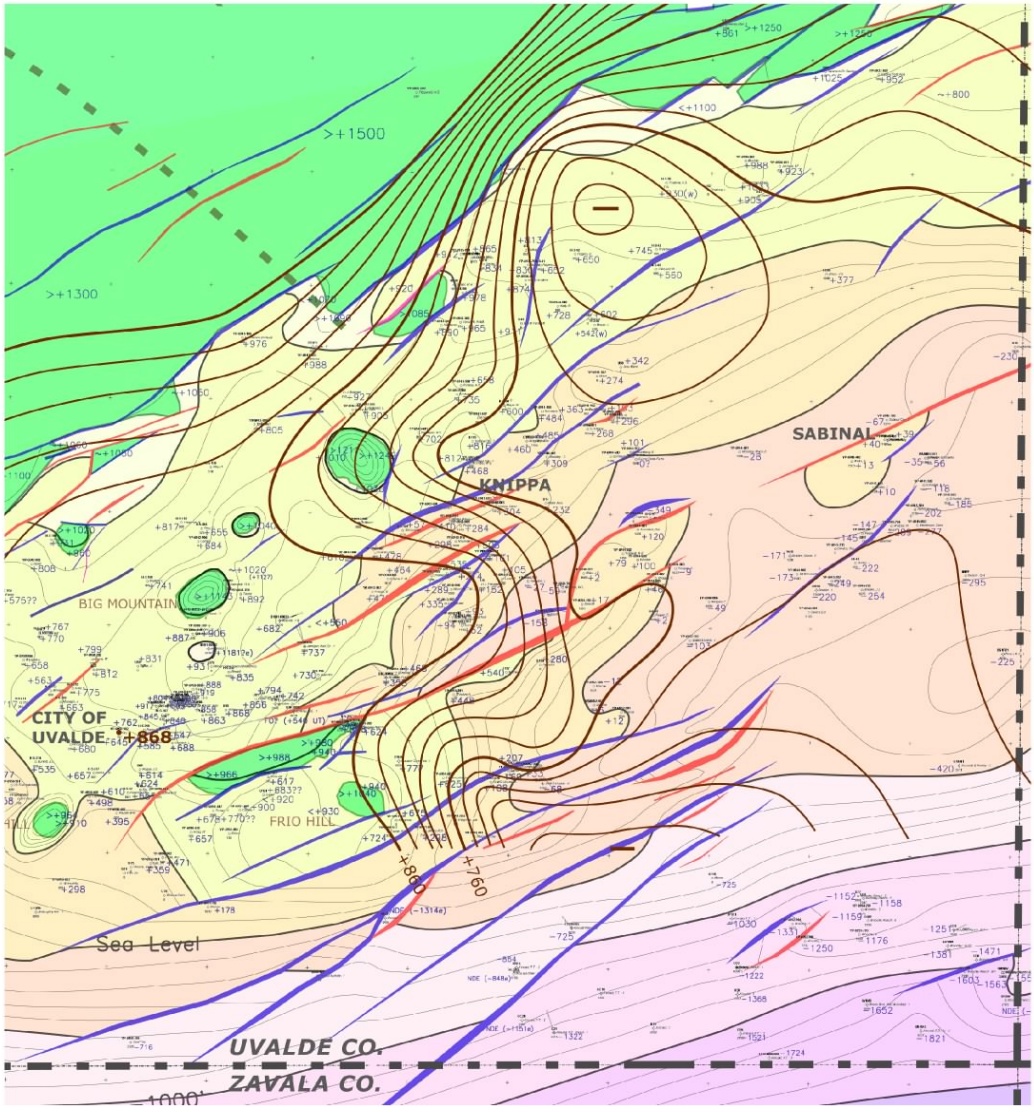

Figure 5. – Piezometric contours for October, 2000 superposed on the structure, Base Del Rio, as presently mapped. Piezometric data from Edwards Aquifer Authority.

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--also Blanco Lake, Concan, Sabinal, Comanche Waterhole

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Appendix

Table 1.
FRONTERA EXPLORATION CONSULTANTS, INC.
KNIPPA MAPPING PROJECT

SUMMARY OF SEISMIC LINES USED
LICENSED BY EDWARDS AQUIFER AUTHORITY
BROKER: SEISMIC EXCHANGE, INC.

Line Names and Exact Locations are Confidential

Line Name	Line Dir.	Group Int'vl (ft)	Shot Int'vl (ft)	Near Trace (ft)	Nominal Fold	Mileage Licensed	Processing Steps	Final Filter (Hz)
A	E-W	110'	110'	55'	180	5.417	Refraction Statics, FK Mig, Beamsteer	12-64
D	W-E	110'	110'	55'	180	7.938	Refraction Statics, DMO	18-48
B	N-S	110'	110'	55'	180	8.146	Refraction Statics, FK Mig, Beamsteer	12-64
C	N-S	110'	110'	55'	180	5.896	Refraction Statics, FK Mig, Beamsteer	12-64
E	N-S	110'	110'	55'	180	4.604	Refraction Statics, DMO	18-48

Table 1 – Seismic Data Parameters and Mileage Licensed (Line names and exact locations are confidential for proprietary reasons)

Table 2 – Well data base for Uvalde County. Sources: Bureau of Economic Geology (BEG), Balcones Energy Library, Well Information Database of the Texas Department of Water Resources (WIID). -- see following sheets

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR DEEPER

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	Survey	SN	A- Abs	Source ID	Dpstl Lse Calls	Svy (Loca	BEG No.	API No.	OldWB ID	Ctr	TWDB ID	TOBIN (9-sec)	(BEG, WIID Spot) LAT (from XY)	(BEG, WIID Spot) LON (from XY)	(Tobin Spot) LAT (so.central zone)	(Tobin Spot) LON (so.central zone)	Texas SP (Tobin Spot) X (so.central zone)	Texas SP (Tobin Spot) Y (so.central zone)	LOGS— TEE	GAGA	BEG	REF	FLG	Log Picks— T/AC Serp	T/Bu	T/DR	T/GT T/Eds (T/SP)
FRIO CO.—																																
Tenneco - Pennzoil	Machen OW	1	**6410**	697	Jun-65	JelosSantos	373	A- 597	BEL	Sligo					1	KB-6960-9	8S-5E-7			29.0339	99.3956	1873600	436730	EL						3235	3328	3420
Amerada	Miller WB	1	**6393**	682		Fequerrod	251	A- 306	BEL	Hosston					2	KB-6961-6	8S-6E-6			29.0669	99.2704	1913620	448600	EL						2935	3115	3200
Tenneco - Pennzoil	Goad TJ	1	**6542**	658	May-65	Bailey		A- 52	BEL	Sligo					3	KB-6961-9	8S-6E-7			29.0413	99.2641	1915610	439300	EL						3447	3548	3636
Tenneco - Pennzoil	Roberts	1	**7143**	644	Aug-65	Culler	153	A- 165	BEL	Sligo					4	KB-6961-8	8S-6E-8			29.0002	99.3157	1899100	424400	EL						3885	3986	4072
MEDINA CO.—																																
Skinner	Reilley, J	4	**2005**	*1099*		Reiley		A- 1332	BEL						5	TD-6937-6	5S-5E-6			29.4352	99.3783	1879600	582610	NCNL								
McCormick, HW	Amberson, J	1	**3056**	1040	Jul-45	Sherrer	469.75	A- 918	BEL						6	TD-6938-8	5S-6E-8			29.3811	99.3082	1901840	562870	NWF						610		
Roxanne	Rothe, T	1	**3281**	1117	Oct-53	Medina CSL	1012	A- 660	BEL	Paleozoic					7	TD-6938-7	5S-6E-9			29.4064	99.3584	1885900	572120	EL								
Ford, EJ etal	Nunley, RJ	1	**5033**	892	Dec-55	TCRR	595	A- 1423	BEL						8	TD-6953-9	7S-5E-7			29.1819	99.3924	1874800	490530	NL								
Fina	Faust, DF	1	**23316**	900	Mar-91	Looney	871	A- 603	BEL	Paleozoic!					9	TD-6954-2	7S-6E-2			29.2304	99.3292	1895000	508100	NL								
Gulf	Richardson, HF	1	**6955**	868	Feb-59	Phelps	769	A- 1408	BEL	Paleozoic?					10	TD-6954-2	7S-6E-2			29.2129	99.2979	1904970	501710	EL						1257	1388	1465
Ginther Warren	Corle, L	1	**4109**	771	May-62	Twohig	112	A- 977	BEL						11	TD-6954-6	7S-6E-6			29.1736	99.2891	1907750	487420	NL								
Galaxy	Leoncita Land Co	1	**5130**	726	Sep-73	BS&F	73	A- 161	BEL	Sligo					12	TD-6961-2	8S-6E-2			29.1068	99.3317	1894080	463160	EL								2470
Tenneco - Pennzoil	Hardie, E	1	**5352**	703	Apr-65	J.Smith	268	A- 923	BEL	Sligo					13	TD-6961-2	8S-6E-2			29.1060	99.3284	1895150	462870	EL						2398	2486	2570
Humble	Wilson	1	**7167**	725	Dec-44	AB&M	47	A- 38	BEL	Paleozoic		6.4 mi SW Yancey			14	TD-6962-1	8S-7E-3	29.1000	99.2300					EL						2560	2647	2730
UVALDE CO.—																																
Einstoss	Wardlaw Rch	1	**2515**	1792	Mar-41	Middleton	926	A- 995	BEL	Paleozoic	FNW	NW Part of UvCo			1	YP-6925-6	4S-1E-6			29.5746	99.9025	1713130	634220	DL								55
Gulf Oil	Zesch etal	1	**5093**	1500	Oct-63	GC&SF	33	A- 939	BEL		1245	22 mi NW Uv			2	YP-6925-8	4S-1E-8			29.5058	99.9291	1704480	609270	IEL								
Transcontinental	Patterson, W.B., Jr.	1	**3930**	1600	Dec-15	Henry	934	A- 970	BEL	Paleozoic		24 mi N Uv		B-8-1	3	YP-6926-9	4S-2E-7			29.5456	99.7771	1752910	623400	?								
Gulf Oil	Magruder etal	1	**7611**	1547	Jul-62	Enriquez	896	A- 883	BEL	Paleozoic	858	Nr Real Co Line			4	YP-6927-6	4S-3E-6			29.5645	99.6480	1794000	629990	EL								
	Brown, J.R.		**995**	*1599*				A-	H	Hosston				B-8-21	5	YP-6927-7	4S-3E-9															
Texas Co.	Mitchell, C.C. etal	1	**6503**	1668	Jan-49	HE&WT	855	A- 1116	BEL	Paleozoic	2298	4 mi W Utopia		B-9-16	6	YP-6928-1	4S-4E-3			29.6007	99.5917	1811980	643080	EL								
Universal Pet	Mountain Eagle Rch	1	**2370**	1346	Oct-49	MP Zoto	932	A-	BEL	Paleozoic		3 mi SE Utopia			7	YP-6929-1	4S-5E-3			29.5818	99.4918	1843700	636050	SL								
	Mason		**650**	1504	Jan-53			A-		Glen Rose		U103		H-1-9	8	YP-6933-6	5S-1E-6	29.4500	99.9106								23					
	Mason, F.,Jr.		**385**	1332				A-		Glen Rose		U101		H-1-12	9	YP-6933-601	5S-1E-6	29.4269	99.8969								23					
	Wynn.		**396**	1250				A-				U108		*H-1-197*	10	YP-6933-901	5S-1E-7	29.3933	99.8786								23					
Smith, A.	Echols G		**1275**	*1199*	May-55			A-	H	Hosston				H-2-16	11	YP-6935-2	5S-3E-2															
	Santleben, O.		**600**	1120	May-56			A-				U109		H-3-32	12	YP-6935-6	5S-3E-6	29.4178	99.6281								23					
	Fitzgerald, W.E.		**237**	1150	May-57			A-				U102		H-2-23	13	YP-6935-602	5S-3E-6	29.4458	99.6650								23					*30*
Kucera & Kucera	Seidel, W.A.	1	**1815**	1082	Sep-55	T.West	653	A- 516			660	8 mi N Knippa			14	YP-6935-9	5S-3E-7			29.3754	99.6489	1793350	561260									
	Seidel		**0**	1080				A-				U211			15	YP-6935-9(a)	5S-3E-7	29.3853	99.6367								3					246
Bishop?Seidel?	Seidel, W.A.		**1123**	1089	May-55			A-		Glen Rose		U213		H-3-40	16	YP-6935-9(b)	5S-3E-7	29.3856	99.6408								3					
	Seidel, W.A.		**674**	1092	May-55			A-				U214		H-3-39	17	YP-6935-901	5S-3E-7	29.3867	99.6461								3					180
	Seidel & Sons		**0**	1090				A-				U212			18	YP-6935-903	5S-3E-7	29.3853	99.6417								3					225
Gulf Oil	Fenley etal	1	**2280**	1221	Jul-63	Fenley	348	A- 1722	BEL	GR?	1980	10 mi NNW Sabinal			19	YP-6936-3	5S-4E-1			29.4713	99.5363	1829370	595950	EL								360
	Jackson, E.F.		**760**	1065	May-05			A-				U218		H-3-23	20	YP-6936-601	5S-4E-6	29.4194	99.5136								3					142
	Mechler		**0**	1096				A-				U100			21	YP-6936-602	5S-4E-6	29.4214	99.5278								3					108
	Bishop, David		**852**	1073				A-				U3			22	YP-6936-7	5S-4E-9	29.3883	99.6192								1	gcr				260
	Rogers, D.		**880**	1060	May-56			A-				U209		H-3-41	23	YP-6936-7(a)	5S-4E-9	29.3828	99.6131								3					408
	Rogers, D.		**499**	1040	Apr-43			A-				U215		H-3-42	24	YP-6936-7(b)	5S-4E-9	29.3869	99.5986								3					390
	Nayak Aviation		**0**	1050				A-				U207			25	YP-6936-704	5S-4E-9	29.3772	99.6192								3					176
	Bishop		**0**	1060				A-				U210			26	YP-6936-705	5S-4E-9	29.3828	99.6181								3					230
	Truelove, Larry		**0**	1085				A-				U42			27	YP-6936-800	5S-4E-8	29.4106	99.5433								2	g				
	Truelove, K.S.		**505**	1025	Jan-56									H=3-43	28	YP-6936-8				29.3888	99.5647	1820180	565990									280
	O'Bryant, M.		**800**	*1025*	Jan-56									H=3-44	29	YP-6936-8				29.3815	99.5649	1820106	563345									465
	Truelove, K.S.		**745**	*1070*	Jan-56									H-3-25	30	YP-6936-8				29.4132	99.5608	1821465	574850									
	Chapman Grain Inc.		**767**	1185				A-				U4			31	YP-6936-9	5S-4E-7	29.4133	99.5286								1	gcr				152
	Henry, Ray H.		**0**	1071				A-				U43			32	YP-6936-9	5S-4E-7	29.4086	99.5222								2	gr				166
	Swanson, Dr. George		**0**	1192				A-				U44			33	YP-6937-400	5S-5E-4	29.4542	99.4947								2	g				167
TWDB	Sabinal Test Hole		**694**	1158	Jan-74			A-				U2			34	YP-6937-402	5S-5E-4	29.4531	99.4725								2	gcrn	1;3;6			206
	Henry, J.A.		**1600**	1027	Apr-33			A-				U208		I-1-17	35	YP-6937-7	5S-5E-9	29.3800	99.4939								3					650
	Rosenall, J.		**593**	1082	Jan-29									H-4-34	36	YP-6941-7				29.2536	99.9835	1686390	517700									573
	Ligosky, George		**483**	1033				A-				U6			37	YP-6941-9	6S-1E-7	29.2903	99.8825								1	g				126
	Raney		**0**	970				A-				U172			38	YP-6942-703	6S-2E-9	29.2608	99.8358								3					395
USGS (TDWR)	YP4 Test Well		**707**	1005				A-				U1			39	YP-6942-709	6S-2E-9	29.2731	99.8622								2	gcrn	1;3;6			62
	Pardi		**0**	1020				A-				U188			40	YP-6942-711	6S-2E-9	29.2869	99.8739								3					80
	Pardi		**0**	1031				A-				U190			41	YP-6942-712	6S-2E-9	29.2894	99.8706								3					25
	Rambie		**0**	975				A-				U184		*H-5-186*	42	YP-6942-8	6S-2E-8	29.2811	99.8158								3					44
	Speir		**0**	980				A-				U178			43	YP-6942-803	6S-2E-8	29.2722	99.8239								3					172
	Hargrove, H.		**800**	1002	May-56			A-				U189		H-5-185	44	YP-6942-9(a)	6S-2E-7	29.2878	99.7617								3					185
	Watkins, C.		**389**	976	May-56			A-				U176		H-5-188	45	YP-6942-9(b)	6S-2E-7	29.2661	99.7758								3					235
	Stoy, P.		**370**	1005				A-				U187		H-5-184	46	YP-6942-9(c)	6S-2E-7	29.2856	99.7533								3					350
	Toone	1	**0**	985				A-				U166			47	YP-6942-901	6S-2E-7	29.2544	99.7589								3					
	Toone	2	**0**	995				A-				U165			48	YP-6942-902	6S-2E-7	29.2544	99.7514								3					
	Carnes		**0**	998				A-				U183			49	YP-6942-906	6S-2E-7	29.2808	99.7547								3					314
Evans & Thompson	Farris	1	**1086**	1093		Hammond	654	A- 231	BEL	400 FSL 400 FWL 535ac.	cent	12 mi N Uv			50	YP-6943-1	6S-3E-3			29.3525	99.7075	1774610	553020	NF								
	Briscoe		**0**	1090				A-				U201			51	YP-6943-103	6S-3E-3	29.3478	99.7100								3					102
	Hutcherson (Kolaya)		**560**	1081	May-52			A-				U202		H-2-32	52	YP-6943-106	6S-3E-3	29.3556	99.7369								3					105
	Brigman, John		**759**	1047				A-				U7			53	YP-6943-2	6S-3E-2	29.3358	99.6944								1	gcr				120
	Sanderlin		**0**	1068				A-				U206			54	YP-6943-3	6S-3E-1	29.3725	99.6453								3					90
	Rimkus, Maurice		**837**	1031				A-				U9			55	YP-6943-300	6S-3E-1	29.3353	99.6475								1	gcr				296
	Sanderlin, A.C.		**730**	1080	Jan-67			A-				U203			56	YP-6943-301	6S-3E-1	29.3606	99.6542								3					190
T.W.D.B.	Rimkus, A.R.	3	**752**	1026	Jun-74			A-				U46			57	YP-6943-304	6S-3E-1	29.3386	99.6458								2	crn				368
	Verstuyft, R&M		**784**	1059	May-76			A-				U204			58	YP-6943-305	6S-3E-1	29.3617	99.6461								3				*35*	94
	Stoy, P.		**518**	1037	May-55			A-				U191		H-5-178	59	YP-6943-4	6S-3E-4	29.3081	99.7497								93					
	EUWD		**881**	1055	Sep-89			A-				U10			60	YP-6943-409	6S-3E-4	29.3239	99.7300								1	gcr				250
	Thomas		**0**	1058				A-				U47			61	YP-6943-44	6S-3E-4	29.3239	99.7317								2	r				368
	Ashby & Chinn		**535**	1036	Jan-39									H-5-179	62	YP-6943-501	6S-3E-5	*29.3294*	*99.6908*													*310*
	Gilleland, L.		**888**	1031	May-71										63	YP-6943-502	6S-3E-5	*29.3300*	*99.6853*					DL					*25*	70	126	

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR DEEPER

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	Survey	SN	A-	Abs	Source ID	Dpstl	Lse Calls	Svy (	Loca	BEG No	API No.	OldWB ID	Ctr	TWDB ID	TOBIN (9-sec)	(BEG, Wll Spot) LAT	(BEG, Wll Spot) LON	(Tobin Spot) LAT (from XY)	(Tobin Spot) LON	Texas SP (Tobin Spot) X (so.central zone)	Texas SP (Tobin Spot) Y	LOGS— TEE	GAGA	BEG	REF	FLG	Log Picks— T/AC	T/Bu	T/DR	T/GT T/Eds (T/SP)
																																	Serp			
	Meyer, W.		**506**	1012	Jan-56			A-								U198	H-3-58	64	YP-6943-6(a)	6S-3E-6	29.3314	99.6278							3						412
	Knippa City Well	2	**0**	1000				A-								U193		65	YP-6943-6(b)	6S-3E-6	29.3181	99.6408							3						184
	Niemeyer, H.O.		**850**	1022	Jan-67					WIID								66	YP-6943-601	6S-3E-6	*29.3211*	*99.6633*					DL					*35*	195	250	320
	McFatter, W.B.		**1000**	998	Jun-68					WIID								67	YP-6943-602	6S-3E-6	*29.3100*	*99.6419*													530
	Knippa WSC		**1376**	985	Aug-62					WIID							H-6-87	68	YP-6943-603	6S-3E-6	*29.2958*	*99.6367*					DL					676	917		1018
	Ashby & Clown		**300**	979	<29					WIID							H-6-1	69	YP-6943-604	6S-3E-6	*29.2936*	*99.6589*													
USGS	Knippa, Elmer		**1302**	978	Aug-73			A-								U11		70	YP-6943-605	6S-3E-6	29.2942	99.6311							0 g	1;3					674
	Knippa City Well	1	**698**	1000	Mar-78			A-								U192		71	YP-6943-606	6S-3E-6	29.3111	99.6414								3					188
EUWD	Knippa		**902**	1007	Sep-89			A-								O13		72	YP-6943-607	6S-3E-6	29.3267	99.6386								9					
Prod'n Svc (Sorelle & Baker)	Kennedy, G.A.	1	**2865**	997	Apr-48	JJ Guerra	75	A-	216	BEL	Hosston		320	4 mi	NE Uv 3400' NW		H-5-191	73	YP-6943-7	6S-3E-9			29.2652	99.7420	1763420	521350	EL								NL	
Shell	Walcott	1	**855**	965	May-55			A-								U169	H-5-192	74	YP-6943-7	6S-3E-9	29.2550	99.7114								3					160
Bell O&G	Wolcott (Walcott)	1	**3030**	965		Moore	374	A-	1000	BEL	Twin Mtn		102		U169		H-5-40	75	YP-6943-7	6S-3E-9			29.2520	99.7206	1770220	516520	DL		0	3			120	195	283
	Toone		**0**	984				A-								U173		76	YP-6943-701	6S-3E-9	29.2617	99.7369								3					92
	Kramer, W.H.		**1235**	977	Jan-55			A-								U186	H-5-181	77	YP-6943-8	6S-3E-8	29.2853	99.6697								93		320	780	835	920
	Kramer, W.H.		**988**	963	Mar-64					WIID							H-5-291	78	YP-6943-801	6S-3E-8	*29.2772*	*99.6811*													485
	Knippa, E.		**916**	952	Jan-65					WIID								79	YP-6943-802	6S-3E-8	*29.2628*	*99.6822*										110	298	383	477
	Knippa, EW		**1072**	956	Jul-69					WIID								80	YP-6943-803	6S-3E-8	*29.2675*	*99.6758*										*5*	325	408	492
	Knippa, E.		**987**	970	Dec-70			A-								U181		81	YP-6943-804	6S-3E-8	29.2758	99.6925								3		*65*	190	272	360
	Gilleland		**900**	970	Jan-82					WIID								82	YP-6943-806	6S-3E-8	*29.2881*	*99.6881*													
	Friesenhahn, Lawrence		**1079**	948				A-		28YP						U8		83	YP-6943-9	6S-3E-7	29.2658	99.6364							0 gcr	1;4					796
	Posey		**1414**	977	Apr-64					WIID							H-6-93	84	YP-6943-901	6S-3E-7	*29.2872*	*99.6456*													*693*
	Henkel, H.		**1476**	955	Nov-64					WIID							H-6-92	85	YP-6943-902	6S-3E-7	*29.2764*	*99.6336*										254	631	707	794
	Reagan, R.		**813**	962	Aug-68					WIID								86	YP-6943-903	6S-3E-7	*29.2697*	*99.6511*											268	339	427
	Reagan, R.		**1471**	959	Jan-63					WIID							H-6-86	87	YP-6943-904	6S-3E-7	29.2700	99.6450													*745*
	Zinsmeister		**1298**	955	Nov-65					WIID							H-6-96	88	YP-6943-905	6S-3E-7	*29.2689*	*99.6578*													
	Zinsmeister		**365**	940	Nov-62					WIID							H-6-85	89	YP-6943-907	6S-3E-7	*29.2586*	*99.6517*										205	555	570	605
	Woodley, TM, Jr		**1010**	948	Aug-67					WIID								90	YP-6943-908	6S-3E-7	*29.2639*	*99.6494*										205	480	575	659
	Bratcher		**1305**	939	Aug-67					WIID								91	YP-6943-909	6S-3E-7	*29.2536*	*99.6489*										210			845
Able Irrig.Co.	Able Irrig.Co. (Bracher, RC)		**1311**	930	Nov-52			A-								U163	H-6-23	92	YP-6943-910	6S-3E-7	*29.2506*	*99.6403*								3					945
	Whites Mines		**946**	975	Jan-26												H-6-2	93	YP-6943-911	6S-3E-7	*29.2894*	*99.6503*										*46*	402	476	565
	Knippa- S.Tx. Aggregate		**0**	980				A-								U48		94	YP-6943-911A	6S-3E-7	29.2944	99.6450							0 r	2					556
	Lang, R.		**1246**	947	Mar-69					WIID								95	YP-6943-912	6S-3E-7	*29.2678*	*99.6281*										305	679	766	842
	Bratcher		**1289**	933	May-53			A-								U164	H-6-22	96	YP-6943-914	6S-3E-7	*29.2528*	*99.6447*								3					840
	Knippa, E. (Miyakawa)		**1473**	957	Jan-74			A-								U182		97	YP-6943-915	6S-3E-7	29.2764	99.6358								3					454
	Miyakawa		**1408**	970	Apr-74			A-								U185		98	YP-6943-916	6S-3E-7	29.2814	99.6475								3		109	518	600	672
	Carnes, Eddy		**1196**	932	Jun-86					WIID								99	YP-6943-917	6S-3E-7	*29.2506*	*99.6447*										731	800	840	880
	Meyer, A.		**455**	1027				A-								U205	H-3-49	100	YP-6944-1	6S-4E-3	29.3631	99.5931								3					425
	Meyer, L.		**420**	1023													H-3-50	101	YP-6944-1				29.3610	99.5903	1811985	555900									
	Kelly, Ray		**880**	1043				A-								U13		102	YP-6944-100	6S-4E-3	29.3678	99.6056							0 g	1					315
	Verstuyft, Roger & Martin		**0**	1043				A-								U49		103	YP-6944-100	6S-4E-3	29.3614	99.6208							0 g	2					132
	Ward		**0**	1002				A-								U200		104	YP-6944-107	6S-4E-3	29.3422	99.5892								3					728
	Ward, Jess		**0**	1002				A-								U50		105	YP-6944-2	6S-4E-2	29.3456	99.5794							0 g	2					660
	Ward, Jess		**1455**	972				A-								U14		106	YP-6944-4	6S-4E-4	29.2956	99.6103							0 gcr	1					740
	Woodley	2	**0**	1000				A-								U195		107	YP-6944-4	6S-4E-4	29.3183	99.6183								3					540
	Knippa, G.		**862**	992	Jan-68			A-		WIID	<BEG					U197		108	YP-6944-401	6S-4E-4	29.3261	99.5917					DL			3		205	550	665	724
	Faulkenberg, E.		**943**	998	Nov-69					WIID								109	YP-6944-402	6S-4E-4	*29.3300*	*99.5936*					DL					120	480	560	635
	Woodley K.K.		***89***	*978*	*Jan-29*					*WIID*							*H-6-8*	110	*YP-6944-403*	*6S-4E-4*	*29.3031*	*99.6106*											*NDE*		
	Niemeyer, V.		**1081**	1004	Jul-69					WIID								111	YP-6944-404	6S-4E-4	*29.3292*	*99.6119*					DL				?		362	445	520
	Woodley, T.M., Jr.	3	**1322**	994	Oct-77			A-								U192		112	YP-6944-405	6S-4E-4	29.3125	99.6100	29.1839	99.3639			DL			3		285	535	615	685
	Woodley, T.M., Jr.	4	**1165**	1000	Aug-78			A-								U194		113	YP-6944-406	6S-4E-4	29.3183	99.6150	29.1907	99.3655			DL			3		*90*	400	460	515
	Dornbush, A.		***100***	*971*	*Mar-85*					*WIID*								114	*YP-6944-407*	*6S-4E-4*	*29.3072*	*99.5875*													
	Niemeyer, V.		**994**	986	Jan-64					WIID							H-6-97	115	YP-6944-501	6S-4E-5	*29.3269*	*99.5822*													690
	Faulkenberg, E.		**1380**	971	Apr-65					WIID								116	YP-6944-502	6S-4E-5	*29.3144*	*99.5750*										250	630	785	870
	Dornbush, P.		**1500**	974	Jan-64					WIID							H-6-91	117	YP-6944-503	6S-4E-5	*29.3128*	*99.5828*													
	Sunny Clime Farm		**1640**	961	Jan-65					WIID							H-6-94	118	YP-6944-504	6S-4E-5	*29.3119*	*99.5728*													*961*
	Knippa, G.		**1514**	988	Mar-68					WIID								119	YP-6944-506	6S-4E-5	*29.3278*	*99.5833*					DL					131	635	715	795
	Woodley, Mack Jr.		**1550**	1002	Nov-71					WIID								120	YP-6944-601	6S-4E-6	*29.3147*	*99.5297*					DL					*120*	890	954	1030
	Miles, JE		**1660**	935	Jan-62					WIID							H-6-83	121	YP-6944-701	6S-4E-9	*29.2700*	*99.5944*													*933*
	Herndon, L.		**1604**	931	Apr-63					WIID							H-6-84	122	YP-6944-702	6S-4E-9	*29.2669*	*99.6175*													*958*
	Briscoe		**1685**	935	Sep-67			A-								U170		123	YP-6944-703	6S-4E-9	29.2586	99.5950								3		105			918
	Herndon		**1794**	922	Jan-64			A-								U168	H-6-89	124	YP-6944-704	6S-4E-9	29.2547	99.6108								3		550	915	1005	1080
	Herndon, W.L.		**1330**	935	Jan-28					WIID							H-6-16	125	YP-6944-705	6S-4E-9	*29.2647*	*99.6031*													*994*
	Mosing(4M Ranch)		**1579**	949				A-		31YP						U12/15		126	YP-6944-8	6S-4E-8	29.2903	99.5667							0 gr	1					1298
	Regan, C.		**1520**	912				A-								U167	H-6-44)	127	YP-6944-8(b)	6S-4E-8	29.2547	99.5653								3					910
	Saunders, Dan		**1765**	951	Jul-67					WIID								128	YP-6944-801	6S-4E-8	*29.2861*	*99.5719*													831
	Traugott, RE		**1450**	930	Jul-65					WIID								129	YP-6944-802	6S-4E-8	*29.2772*	*99.5781*													*851*
	Reagan, C.		**1629**	925	Sep-67					WIID								130	YP-6944-803	6S-4E-8	*29.2719*	*99.5561*					DL								934
	Sanders			956	Jan-64					WIID							H-6-88	131	YP-6944-804	6S-4E-8	*29.2906*	*99.5736*													
	Reagan, C.		**1125**	926						WIID							H-6-43	132	YP-6944-805	6S-4E-8	*29.2658*	*99.5661*													
	Reagan, C.		**1650**	895	Dec-72			A-								U171		133	YP-6944-806	6S-4E-8	29.2597	99.5422								3			800	914	944
	Reagan, C.		**1200**	926	Jun-86					WIID								134	YP-6944-807	6S-4E-8	*29.2683*	*99.5644*					DL						800	840	880
	Wooton		**0**	936				A-								U180		135	YP-6944-808	6S-4E-8	29.2750	99.5719								3					836
Word, T.T.	Braden, Quinn	1	**1200**	906	Aug-34	BS&F	185	A-	100		Edwards		200	5 mi	SW Sabinal		I-4-32)	136	YP-6944-9	6S-4E-7			29.2768	99.5086	1837880	525170	DL					485	929	1005	1077
	Owens Est		**1165**	866	Jan-34					WIID							I-4-32	137	YP-6944-901	6S-4E-7	*29.2561*	*99.5008*													
	SAWS Uvalde	2	**1560**	892	Mar-99					WIID								138	YP-6944-902	6S-4E-7	*29.2700*	*99.5056*					DL					280	892	973	1065

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Company	LWName	Wll No	TD	Elev (KB)	Date	Survey	SN	A- Abs	Source ID	Dpstl Lse Calls	Svy (Loca	BEG No	API No.	OldWB ID	Ctr	TWDB ID	TOBIN (9-sec)	(BEG, WIID Spot) LAT	(BEG, WIID Spot) LON	(Tobin Spot) LAT (from XY)	(Tobin Spot) LON	Texas SP (Tobin Spot) X (so.central zone)	Y	LOGS— TEE	GAGA	BEG	REF	FLG	Log Picks— T/AC	T/Bu	T/DR	T/GT T/Eds (T/SP)
																													Serp			
Ferguson	Hashknife Ranch		**1828**	992				A-					U18		139	YP-6945-3	6S-5E-1	29.3536	99.4153							0 gcr	1					1222
	Sabinal City Well		**2700**	954	Jan-19	76' by WIID		A-					U196	I-4-35	140	YP-6945-401	6S-5E-4	29.3192	99.4681					DL		0	3		300	765	842	915
	White, S.		**1161**	934	Mar-65				WIID						141	YP-6945-402	6S-5E-4	*29.3114*	*99.4831*										283	753	823	921
	Griffin, J.		**1150**	920	Jan-66				WIID						142	YP-6945-403	6S-5E-4	*29.3019*	*99.4739*													910
	City of Sabinal		**1493**	*954*	Jan-19				WIID					I-4-37	143	YP-6945-404	6S-5E-4	*29.3194*	*99.4694*													930
	City of Sabinal	3	**1211**	953	Jan-53				WIID					I-4-34	144	YP-6945-405	6S-5E-4	*29.3267*	*99.4686*					DL					350	913	985	1020
	City of Sabinal		**1499**	954	Oct-87			A-					U19		145	YP-6945-406	6S-5E-4	29.3194	99.4694					DL		0 gcr	1		440	768	844	914
	Roberts		**1368**	935				A-					U16		146	YP-6945-5	6S-5E-5	29.3128	99.4525							0 gcr	1					970
	Peyton & Roberts		**1384**	932	Nov-63				WIID						147	YP-6945-501	6S-5E-5	*29.3128*	*99.4514*										660	833	905	988
	Schudde, EG		**1465**	922	Dec-66				WIID						148	YP-6945-502	6S-5E-5	*29.3028*	*99.4531*													1040
	Schudee, Jerry		**1526**	915	Jan-67				WIID						149	YP-6945-503	6S-5E-5	*29.2978*	*99.4433*													1100
	Rehm, Russell		**1510**	914	Oct-65				WIID						150	YP-6945-504	6S-5E-5	*29.2939*	*99.4567*					DL					670	960	1036	1116
Locke-Wood	Braden	1	**1160**	860	Jul-34	Young	397	A-			1825	5 mi S Sabinal			151	YP-6945-7	6S-5E-9			29.2642	99.4976	1841360	520580	DL					550	930	1005	1080
	Gulley, J.		**1531**	898				A-	D&A				U179	I-4-40	152	YP-6945-7	6S-5E-9	29.2742	99.4814							0	3					1120
	Halbardier, Charles		**1657**	910				A-					U17		153	YP-6945-7	6S-5E-9	29.2822	99.4781							0 gcr	1					1055
	Pepper		**1706**	915	Apr-67				WIID						154	YP-6945-701	6S-5E-9	*29.2850*	*99.4786*					DL						898	980	1062
	Braden		**1685**	894	Jul-65				WIID					I-4-52	155	YP-6945-702	6S-5E-9	*29.2675*	*99.4911*					DL					574	1000	1068	1143
	Braden, J.J.		**1675**	885	May-67				WIID						156	YP-6945-703	6S-5E-9	*29.2644*	*99.4786*					DL					499	978	1063	1139
	Wiebolt, Werner		**1655**	901	Jan-66				WIID					I-4-55	157	YP-6945-704	6S-5E-9	*29.2878*	*99.4664*													*1190*
	Owens, Roy			910	Jan-53				WIID						158	YP-6945-705	6S-5E-9	*29.2794*	*99.4897*													
USGS	Nelson, S.G. Fee	Q-4	**1910**	885	Dec-57	Zepeda	413	A- 553	D&A				U177	I-4-42	159	YP-6945-8(a)	6S-5E-8	29.2697	99.4356	29.2686	99.4357	1861100	522100	EL		0	3		690	1035	1110	1180
	Henderson, Sam		**1280**	903	Jan-66				WIID					I-4-54	160	YP-6945-802	6S-5E-8	*29.2881*	*99.4558*													1180
Pan American	Smyth, W.H.	1	**3686**	876	Jul-63	G.T. Nunn	128	A- 1009	Q35	467 FW Glen 1000 FN 640ac.	467	12 m	U35	42-463-00040	161	YP-6949-7	7S-1E-9	29.1404	99.9743	29.1328	99.9739	1689120	473770	IEL		0 c			*368*	1253	1358	1478
	Clements, B.		**809**	939	May-48			A-					U144	H-4-45	162	YP-6950-1	7S-2E-3	29.2172	99.8569							0	3					600
	Duvall, Everett		**874**	937				A-	32YP				U20		163	YP-6950-100	7S-2E-3	29.2175	99.8567							0 gr	1					606
	OKM Ranch		**1402**	958	Jul-73			A-					U145		164	YP-6950-108	7S-2E-3	29.2181	99.8697					DL		0	3		*70*	540	600	666
	Ramsey Est		**0**	937				A-					U51		165	YP-6950-2	7S-2E-2	29.2467	99.8203							0 g	2					167
	Ramsey		**602**	941	May-54			A-					U162	H-5-210	166	YP-6950-2(a)	7S-2E-2	29.2472	99.8203							0	3					174
	Daly, C.		**800**	925				A-					U154	H-5-212	167	YP-6950-2(b)	7S-2E-2	29.2267	99.8064							0	3					150
	Monigan, J.		**800**	928				A-					U152	H-5-213	168	YP-6950-2(c)	7S-2E-2	29.2258	99.8156							0	3					365
	Stoy, P.		**295**	932	Apr-29			A-					U149	H-5-214	169	YP-6950-2(d)	7S-2E-2	29.2214	99.8281							0	3					215
DUP of U152??	Monagin		**0**	928				A-					U150	*H-5-233*	170	YP-6950-2(e)	7S-2E-2	29.2217	99.8114							0	3					265
	Brown, J.D.		**0**	928				A-					U52		171	YP-6950-200	7S-2E-2	29.2336	99.7978							0 g	2					116
	Heine, W.		**137**	927				A-					U160	H-5-209	172	YP-6950-202	7S-2E-2	29.2369	99.8014							0	3					128
	Miyakawa		**360**	938				A-					U159		173	YP-6950-206	7S-2E-2	29.2364	99.8264							0	3					280
Humble O&R	Anderson, L.	1	**5015**	951	Dec-34	J. Guerra	75	A- 216	BEL	Paleozoic	FSEC	4 mi E Uv		H-5-199	174	YP-6950-3	7S-2E-1			29.2416	99.7501	1760800	512780	DL								-230
	Berry, Roger		**0**	935				A-					U57		175	YP-6950-3	7S-2E-1	29.2172	99.7525							0 g	2					72
	Casey, O.V.	2	**0**	932				A-					U54		176	YP-6950-3	7S-2E-1	29.2233	99.7611							0 g	2					27
	Casey, O.V.	3	**0**	*935*				A-					U55		177	YP-6950-3	7S-2E-1	29.2233	99.7611							0 g	2					44
	Royall, Jess		**0**	938				A-					U56		178	YP-6950-3	7S-2E-1	29.2206	99.7539							0 g	2					80
	Raney, R.V.		**157**	901				A-					U141	H-5-218	179	YP-6950-3(a)	7S-2E-1	29.2117	99.7767							0	3					139
	Puccini, J.E.		**4226**	912				A-					U140	H-5-222	180	YP-6950-3(b)	7S-2E-1	29.2108	99.7681							0	3					265
	Uvalde City Well		**637**	925	May-57			A-					U143	H-5-207	181	YP-6950-3(c)	7S-2E-1	29.2172	99.7692							0	3					80
	McFatter, D.		**0**	925				A-					U148	H-5-206	182	YP-6950-3(d)	7S-2E-1	29.2203	99.7717							0	3					99
	Anderson, Don		**0**	920				A-					U60		183	YP-6950-300	7S-2E-1	29.2153	99.7683							0 g	2					72
	Baker, Jerry		**0**	950				A-					U59		184	YP-6950-300	7S-2E-1	29.2350	99.7794							0 g	2					119
	Uvalde Equipment Co.		**161**	919				A-					U21		185	YP-6950-300	7S-2E-1	29.2206	99.7636					gcr		0	1					60
City of Uvalde	City of Uvalde		**287**	905				A-					O10		186	YP-6950-302	7S-2E-1	29.2103	99.7867							0	9;3					260
	Hagg		**221**	938				A-					U153		187	YP-6950-303	7S-2E-1	29.2264	99.7561							0	3					50
USGS	Toone, Jane Kennedy	4	**568**	970				A-					U22		188	YP-6950-309	7S-2E-1	29.2483	99.7544							0 g	1;3					64
	Olmitos Ranch		**550**	965				A-					U161		189	YP-6950-310	7S-2E-1	29.2464	99.7578							0	3					78
	Knowles	1	**199**	936				A-					U64		190	YP-6950-317	7S-2E-1	29.2222	99.7658							0 g	2					132
	Uvalde Equipment Co.		**160**	918				A-					U65		191	YP-6950-321	7S-2E-1	29.2217	99.7625							0 g	2					56
	Casey, O.V.	1	**151**	935				A-					U53		192	YP-6950-323	7S-2E-1	29.2239	99.7606							0 g	2					16
	Casey, O.V.		**180**	922				A-					U66		193	YP-6950-324	7S-2E-1	29.2208	99.7608							0 g	2					42
	Casey, O.V.		**160**	925				A-					U67		194	YP-6950-325	7S-2E-1	29.2228	99.7617							0 g	2					13
	Hutcherson, E.		**960**	936				A-					U136	H-4-88	195	YP-6950-4	7S-2E-4	29.2008	99.8553							0	3					760
	Hoag		**1113**	943				A-					U119		196	YP-6950-406	7S-2E-4	29.1803	99.8719							0	3					875
	Harlan, V.		**1200**	935	May-51			A-					U129	H-4-93	197	YP-6950-410	7S-2E-4	29.1933	99.8567							0	3					740
	Winans, A.		**289**	910				A-					U137	H-5-215	198	YP-6950-5(a)	7S-2E-5	29.2061	99.8072							0	3					230
	Burns, J.H.		**387**	902				A-					U132	H-5-217	199	YP-6950-5(b)	7S-2E-5	29.1958	99.7975							0	3					245
	Burkett, A.L.		**430**	910	May-05			A-					U135	H-5-216	200	YP-6950-5(c)	7S-2E-5	29.1997	99.8217							0	3					375
	U.S.Fish Hatchery		**600**	912	May-50			A-					U128	H-5-163	201	YP-6950-501	7S-2E-5	29.1911	99.8314							0	3		*60*	350	440	535
	U.S.Fish Hatchery		**750**	913	Apr-37			A-					U122	H-5-162	202	YP-6950-507	7S-2E-5	29.1861	99.8286							0	3					655
USGS	Fry, Halden		**0**	910				A-					U68		203	YP-6950-6	7S-2E-6	29.1897	99.7781							0 g	2					286
USGS	Herndon, Louis		**0**	910				A-	H5223				U72		204	YP-6950-6	7S-2E-6	29.2069	99.7650							0 g	2					222
USGS	Pogue, J.C.		**0**	910				A-					U69		205	YP-6950-6	7S-2E-6	29.1972	99.7783							0 g	2					296
USGS	Thomson, J.O.		**0**	910				A-	H5220				U70		206	YP-6950-6	7S-2E-6	29.2078	99.7781							0 g	2					325
	Hancock, D.H.		**863**	900	Apr-27			A-					U126	H-5-52	207	YP-6950-6(e)	7S-2E-6	29.1886	99.7833							0	3		*60*	125	217	290
	Painter, W.R.		**562**	880	May-56			A-					U120	H-5-240	208	YP-6950-601	7S-2E-6	29.1811	99.7878							0	93		*35*	320	400	485
	Capt, E.E.		**640**	898	Apr-28			A-					U123	H-5-53	209	YP-6950-609	7S-2E-6	29.1872	99.7992							0	3					400
	Sutherland, E.L.		**225**	880	May-50			A-					U125	H-5-234	210	YP-6950-611	7S-2E-6	29.1886	99.7703							0	3					225
	Hoag, W.		**350**	882	May-54			A-					U114	H-5-230	211	YP-6950-612	7S-2E-6	29.1744	99.7569							0	3					225
Cheyenne O&G	Willoughby Est	3	**1995**	910	Feb-81	McCabe	60	A- 331		1800 FNSE Wasl 1867 FSSE 643ac.	2260	FNW 8150 FSW			212	YP-6950-8	7S-2E-8			29.1447	99.8211	1737920	477720									

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR DEEPER

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	Survey	SN	A-	Abs	Source ID	Dpstl	Lse Calls	Svy (	Loca	BEG No.	API No.	OldWB ID	Ctr	TWDB ID	TOBIN (9-sec)	(BEG, WIID Spot) LAT	(BEG, WIID Spot) LON	(Tobin Spot) LAT (from XY)	(Tobin Spot) LON (from XY)	Texas SP (Tobin Spot) X (so.central zone)	Texas SP (Tobin Spot) Y (so.central zone)	LOGS— TEE	GAGA	BEG	REF	FLG	Log Picks— T/AC	T/Bu	T/DR	T/GT T/Eds (T/SP)
	Willoughby, Don		**893**	938				A-		29YP						U23		213	YP-6950-803	7S-2E-8	29.1552	99.8108						0	gcr	1;4					640
	Farr, Bo		**0**	915				A-								U74		214	YP-6950-9	7S-2E-7	29.1592	99.7844						0	g	82					
	Briscoe Farm		**0**	888				A-								U76		215	YP-6950-900	7S-2E-7	29.1511	99.7678						0	g	82					
	Sheedy, Nolan		**0**	907				A-								U75		216	YP-6950-900	7S-2E-7	29.1614	99.7817						0	g	82					
	Farr, J.R.		**604**	914	May-48			A-								U111	H-8-69	217	YP-6950-901	7S-2E-7	29.1628	99.7736						0		3			*8*	385	475	555
	Estes, W.O.		**600**	894	May-56			A-								U113	H-5-251	218	YP-6950-902	7S-2E-7	29.1650	99.7686						0		3						423
Branham EA etal	Downie, A.E.	1	**3016**	991	Jul-64	M.Leal	73	A-	309	BEL,BEG	Hoss	1750 FNE 660 FNW 741.41 ac.	175(	2.5 r		U39		219	YP-6951-1	7S-3E-3	29.2056	99.7775	29.2188	99.7146	1772080	504430	EL,Sample	Log,SL				*190*	FO?	FO?	FO?	
	Garvis March		**0**	960				A-								U77		220	YP-6951-1	7S-3E-3	29.2228	99.7206						0	g	2					218
Century O&G	Houston, J.L.	1	**2440**	952		Foster	74	A-	184	T							H-5-34	221	YP-6951-1	7S-3E-3			29.2218	99.7223	1769630	505430										
	Newell		**1492**	965	May-53			A-								U156	H-5-202	222	YP-6951-1	7S-3E-3	29.2331	99.7417						0		3						130
	Williamson Dickie		**0**	941				A-								U80		223	YP-6951-1	7S-3E-3	29.2192	99.7428						0	g	2						73
	Winn, Pete		**0**	968				A-								U79		224	YP-6951-1	7S-3E-3	29.2239	99.7278						0	g	2						174
	Winter Garden Chems (McGlothlin)		**0**	955				A-								U78		225	YP-6951-1	7S-3E-3	29.2350	99.7489						0	g	2						24
	Faber Spires		**0**	955				A-								U81		226	YP-6951-100	7S-3E-3	29.2233	99.7303						0	g	2						99
City of Uvalde	Water Well	B-12	**0**	943				A-		20YP						U82		227	YP-6951-104	7S-3E-3	29.2203	99.7717						0	s	2						26
Pan American	Houston, Alice T.	1	**2602**	958	Jul-63	Gillett	69	A-	214	Q36;2YP;BE	Hoss	2948 FNWc 4791 FSW 3497ac	200(	5 mi		U38		228	YP-6951-2	7S-3E-2	29.2153	99.6975	29.2126	99.6900	1779900	502130	IEL		0	r	31;84'					70
Howeth, Ike	Winslow, F.	1	**3688**	919	May-60	M. Grant	680	A-	212	Q4;BEL	Hoss	2737.8 ac.	330	330		U40		229	YP-6951-2	7S-3E-2	29.2362	99.6818	29.2314	99.6763	1784310	508930	IEL		0	r	1				469	561
	Herndon		**273**	960				A-								U155	H-5-196	230	YP-6951-2(a)	7S-3E-2	29.2322	99.7044							0		3					230
Humble O&R	Winslow, F.		**620**	956	Apr-38			A-								U142	H-5-227	231	YP-6951-2(b)	7S-3E-2	29.2156	99.6925						DL,EL	0		3		FO	FO		222	280
	Winslow, A.		**700**	918	Jan-69					WIID								232	YP-6951-202	7S-3E-2	*29.2331*	*99.6722*														*450*
	Agape Ranch		**750**	950	Apr-80					WIID								233	YP-6951-203	7S-3E-2	*29.2131*	*99.6858*												60	220	326
	Brown, Lloyd		**630**	965	Aug-79													234	YP-6951-204	7S-3E-2	*29.2136*	*99.6953*											*60*	260	310	420
	Neimeyer		**0**	910				A-								U157		235	YP-6951-3	7S-3E-1	29.2336	99.6264						0		3						370
	Winslow, A.		**1050**	906	Jan-68			A-								U151		236	YP-6951-301	7S-3E-1	29.2253	99.6481						0		3			160	370	427	458
	Carter		**0**	923				A-								U124		237	YP-6951-4	7S-3E-4	29.1881	99.7269						0		3						240
Phillips Pet	Houston Core Test	1	**4032**	933	Jan-50	Lester	684	A-	314	T		Paleozoic						238	YP-6951-5	7S-3E-5			29.2008	99.6708	1786000	497820	EL								81	156
	Carter (Sims)		**370**	937				A-								U131		239	YP-6951-403	7S-3E-4	29.1947	99.7250						0		3						320
Fred Ehlers	Ehler		**740**	875				A-								O11		240	YP-6951-406	7S-3E-4	29.1736	99.7408						0		9						
Phillips	Hoag (Turner)		**1560**	883				A-								U118		241	YP-6951-407	7S-3E-4	29.1803	99.7433						0		3						205
	Carnes		**630**	890				A-								U121		242	YP-6951-408	7S-3E-4	29.1822	99.7364						0		93						120
	Turner, B.		**350**	894	Jan-08			A-						old o		U115	H-5-72	243	YP-6951-502	7S-3E-5	29.1750	99.6750						0		3						170
	Hargrove		**0**	885				A-								U117		244	YP-6951-503	7S-3E-5	29.1794	99.6711						0		3						210
	La Moca Ranch (Hargrove)		**2309**	866	May-62			A-								U116	H-5-72A	245	YP-6951-602	7S-3E-6	29.1753	99.6603						0		3						568
	Turner-Johnson		**800**	877				A-								U130		246	YP-6951-603	7S-3E-6	29.1944	99.6519						0		3						252
	Hargrove, Joe		**566**	865						WIID								247	YP-6951-604	7S-3E-6	*29.1794*	*99.6469*														
	Hargrove, Joe		**605**	850						WIID								248	YP-6951-605	7S-3E-6	*29.1733*	*99.6392*														
SAWS	SAWS Uvalde	3	**1400**	876	Apr-99					WIID								249	YP-6951-606	7S-3E-6	*29.1933*	*99.6325*											ig		618	704	768
Pan American	Jernigan, Neil,Sr.	1	**3000**	957	Jun-63	ienegas Irr.	375	A-	709	Q37;27YP;B	Hoss	680 FS 2189 ac.	400(	5.5 r		U36		250	YP-6951-1	7S-3E-3	29.2523	99.7130	29.2427	99.7102	1773520	513100	IEL		0	r	4				80	160	220
	Briscoe		**1010**	868				A-		14YP						U106		251	YP-6951-702	7S-3E-9	29.1464	99.7497						0		3;4						690
B&S Drlg Co	Reeder	2	**1705**	862	Jul-57	J.M. Saes	62	A-	439			AC	1367	FNWL	4500 FNEL			252	YP-6951-8	7S-3E-8			29.1433	99.6760	1784220	476910	EL						1560			*2176*
	Herndon		**0**	910				A-								U158		253	YP-6952-1	7S-4E-3	29.2364	99.6122						0		3						630
	Briscoe		**1571**	899	Jan-68					WIID								254	YP-6952-101	7S-4E-3	*29.2286*	*99.5900*														911
	Briscoe		**1494**	899	Jul-68					WIID								255	YP-6952-102	7S-4E-3	*29.2217*	*99.5897*														905
	Briscoe		**1556**	888	Apr-66			A-								U146		256	YP-6952-201	7S-4E-2	29.2189	99.5781						0		3			260	700	805	876
SAWS	SAWS Uvalde	1	**1500**	882	Dec-98					WIID								257	YP-6952-202	7S-4E-2	*29.2456*	*99.5500*														*985*
	Turner, B.		**1410**	875	Jan-52					WIID							H-6-25	258	YP-6952-401	7S-4E-4	*29.1975*	*99.6253*														*806*
	Turner-Johnson		**1262**	877	Sep-66					WIID							H-6-93	259	YP-6952-402	7S-4E-4	*29.1989*	*99.6239*														670
	Johnson, Pat		**1400**	875	Oct-73			A-								U134		260	YP-6952-403	7S-4E-4	29.1983	99.6161						0		3				*775*		842
SAWS	SAWS Uvalde	4	**1463**	867	Jun-99					WIID								261	YP-6952-404	7S-4E-4	*29.1928*	*99.6108*											263	763	847	935
Intl. Nuclear	Kincaid Ranch	2	**4416**	850	Dec-68	J.M. Evans	150	A-	1671	Q33;7YP;BE	Sligo	467 FN 467 FE 640 ac.	467	15 m		U33		262	YP-6952-7	7S-4E-9	29.1441	99.6024	29.1400	99.5986	1808920	475590	DILL,S		0	r	1;4			892	1396	1489	1575
Steeger, WJ, etal	Kincaid, F.T.	2	**4000**	888	Dec-61	lollingworth	154	A-	1681	BEL		Pearsall	467	9 mi	SE Uv			263	YP-6952-7	7S-4E-9			29.1255	99.6214	1801660	470350	EL						1094	1575	1664	1752
Tenneco - Pennzoil	Kincaid, F.T.	1	**4569**	800	Aug-69	H. Sotelo	377	A-	438	BEL		Hosston	660	6600'	NNW IN1K			264	YP-6952-9	7S-4E-7			29.1437	99.5321	1830150	476840	EL						1209	1670	1745	1830
	Maner		**0**	815				A-								U110		265	YP-6952-9	7S-4E-7	29.1586	99.5403						0		3						1540
	Woodley, F.		**2632**	784	Jul-66					WIID							H-9-25	266	YP-6952-901	7S-4E-7	*29.1419*	*99.5069*														2115
	Woodley, F.		**2242**	782	Dec-66					WIID							I-7-17	267	YP-6952-902	7S-4E-7	*29.1356*	*99.5017*						DL								2032
Wilcox O&G	Woodley, T.M.		**3090**	750	Jan-38												I-7-9	268	YP-6961-1	8S-5E-3					1849090	466771						1710	2190	2270	*2400*
	Ingrum, R.P.		**653**	962	May-52			A-								U175	H-4-43	269	YP-6949-3	7S-1E-1	29.2314	99.9203						0	0	0	93					635
Bennett & Sorrels	Rehm M.	1	**4505**	835	Jan-47	P. Fricker	870.5	A-	197	BEL		Palec 330 FW 330 FN 80 ac.	330	.25mi	FEL UvCo		I-4-36	270	YP-6953-2	7S-5E-2	Loc?		29.2410	99.4199	1866100	512070	EL,Sample	Log					547	908	980	*1060*
Roberts, J.W.	*Thien, W.D.*	*1*	***1000***	*844*	*Jan-61*	*R.M. Potter*	*390*	*A-*	*373*			*609ac.*		*FNECnr*	*4478W 762 S*			*271*	*YP-6953-4*	*7S-5E-4*					*1842300*	*492910*										
Green JA	Kennedy & Nunley	1	**3511**	825	Dec-46	Flores	1063	A-	178	BEL		GR		340(	SE Corner UVCO		I-4-49	272	YP-6953-5	7S-5E-5			29.2001	99.4381	1860250	497200	DL						550	1085	1173	1245
Bennett & Sorrels	Rehm, M.	1	**4505**			Cruz	382	A-	137	T									YP-6953-5	7S-5E-5	Loc?		29.1777	99.4557	1854600	489100										
Bennett & Sorrels	Rehm, M.	1	**4505**			Otelo	387	A-	360	T									YP-6953-7	7S-5E-9	Loc?		29.1634	99.4948	1842100	483930										
Gorman Drlg	Woodley Ranch	1	**2517**	752	Jun-60	Huizar	379	A-		Q20;3YP		B/Ec	15730 ac		4281 FNL	U26		273	YP-6953-7	7S-5E-9	29.1514	99.4775						IEL	0	r	1;4			1317	1705	1830	1910
Gorman Drlg	Woodley Ranch	2	**3911**	757	Jul-60	Huizar	379	A-		Q2;4YP		LGR		4695	FN 1	U27		274	YP-6953-7	7S-5E-9	29.1522	99.4797						IEL	0	r	1;4			1310	1686	1819	1909
Gorman Drlg	*Woodley Ranch*	*4*	***1598***	*743*	*Aug-60*	*Huizar*	*379*	*A- 235*				*AC*		*6100*	*NL 11500 FWWL*			*275*	*YP-6953-7*	*7S-5E-9*			*29.1432*	*99.4756*	*1848200*	*476570*	*IEL*						*1372*			*1971*
Gorman Drlg	*Woodley Ranch*	*5*	***1539***	*753*	*Aug-60*	*Huizar*	*379*	*A- 235*						*4450*	*NL 12000 FWWL*			*276*	*YP-6953-7*	*7S-5E-9*																
	Woodley	2	**2575**	746	Jan-60			A-								U107	I-7-15	277	YP-6953-701	7S-5E-9	29.1472	99.4781						0		3						1905
	Woodley, F.		**1990**	739	Sep-64					WIID							I-7-16	278	YP-6953-703	7S-5E-9	*29.1381*	*99.4792*						DL					900	1795	1827	1915
Gorman Drlg	Woodley Ranch	B-11	**4548**	860	Mar-64	Poitevent	67	A-	403	Q6;12YP;BE	Pear	9650 FE 467 FSNL 16000 ac	467	Woo(		U31		279	YP-6953-8	7S-5E-8	29.1419	99.4349	29.1398	99.4399	1859580	475300	EL		0	r	1;4			1523	1955	2027	2111
Gorman Drlg	Woodley Ranch	B-9	**2430**	851	Mar-61	Baker	776	A-	62	Q23;25YP		Eds		8600	NRvr	U30		280	YP-6953-8	7S-5E-8	29.1290	99.4304						IEL	0	r	4			1713	2142	2236	2322

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR DEEPER

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	Survey	SN	A-	Abs	Source ID	Dpstl	Lse Calls	Svy (	Locat No	BEG No.	API	OldWB ID	Ctr	TWDB ID	TOBIN (9-sec)	(BEG, WIID Spot) LAT	LON	(Tobin Spot) LAT (from XY)	LON	Texas SP (Tobin Spot) X (so.central zone)	Y	LOGS— TEE	GAGA	BEG	REF	FLG	Log Picks— T/AC	T/Bu	T/DR	T/GT T/Eds (T/SP)
																															Serp			
Gorman Drlg	Woodley Ranch	B-10	**2292**	812	Mar-61	Poitevent	67	A-	403		Eds		2560	FNL 1800 FEL				281	YP-6953-8	7S-5E-8			29.1341	99.4423	1858790	473200	IEL					1830	2018	2109	2193
Union Oil	Anderson	1	**3775**	825	Dec-06	J.Peck	88	A-	372	BEL	Paleozoic			10 mi SW Uv			H-7-3?	282	YP-6957-3	8S-1E-1		No spot	29.1120	99.8895	*1716000*	*466000*	DL poor					675	1300	1330	1410
Brown & Root	Project Mohole	1	**3479**	840	Dec-64	Ramono	45	A-	405	T	?							283	YP-6959-2	8S-3E-2			29.1219	99.7038	1775290	469190	DILL								
	General Tire Co.		**2325**	890				A-		30YP				U25/24				284	YP-6958-304	8S-2E-1	29.0972	99.7814							0 gcr	1					1606
General Crude Oil	*Kincaid, F.T.*	*2*	***1380***	*896.53*	*Feb-66*	*BS&F*	*155*	*A-*	*82*		*AC*	*3043.4 ac 1320 FN*	*1320 FNL*	*1320 FEL*				285	*YP-6960-1*	*8S-4E-3*			*29.1061*	*99.6190*	*1802330*	*463300*	*IEL*					*1370*			
Steeger, WJ, etal	Kincaid, F.T.	1	**4015**	856	Jul-61	Iollingworth	158	A-	1678	Q3;9YP;BEL	GR	3000 FW 469.5 ac.	3000	11 m	U34			286	YP-6960-1	8S-4E-3	29.1097	99.6088	29.1017	99.6056	1806610	461650	EL		0 r	1;4		1500	1999	2085	2178
General Crude Oil	*Kincaid-State*	*1*	***1176***	*870*	*Feb-66*	*Kincaid*	*154.5*	*A-*	*1833*			*118.5 ac*	*467 FN*	*2365 FE*				287	*YP-6960-1*	*8S-4E-3*			*29.1232*	*99.6224*	*1801300*	*469510*						*1040*			
Ballard etal	Kincaid	1	**2832**	*899*		BS&F	161	A-	81									288	YP-6960-2	8S-4E-2			29.1035	99.5643	1819800	462270									
General Crude Oil	*Kincaid, F.T.*	*1*	***1366***	*823*	*Feb-66*	*James*	*152*	*A-*	*1314*			*3043.4 ac*	*198(*	*6 mi NW Kincaid Fld*				289	*YP-6960-2*	*8S-4E-2*			*29.1161*	*99.5862*	*1812820*	*466870*									
Humble O&R	Kincaid	3	**2300**	800	Jan-25	H. Sotelo	370	A-	438				5614	FSL 5400 FWL			H-9-10	290	YP-6960-3	8S-4E-1			29.1161	99.5296	1830920	466770	DL					1439	1980	2070	2168
Intl. Nuclear	Kincaid Ranch	1	**4890**	773	Dec-68	H.Sotello	377	A-	438	Q32;6YP;BE	Hoss	467 FS 467 FE 640 ac. Blk 5, Area1	5747	5747	U32	42-463-00136		291	YP-6952-9	7S-4E-7	29.1244	99.5277	29.1260	99.5300	1830810	470380	DILL,S		0 r	1;4		1356	1824	1913	1995
Phillips Pet	*Kincaid, F.T.*	*1*	***1960***	*785*	*Apr-50*	*Sotello*	*377*	*A-*	*438*									292	*YP-6960-3*	*8S-4E-1*					*1834920*	*459280*									
Phillips Pet	Kincaid, F.T.	2	**2955**	807	Aug-50	H. Sotelo	377	A-	438		Edw	5280 FNL(Perl) 5280 FEL Svy		4100' SW of #1			H-9-22	293	YP-6960-3	8S-4E-1			29.1016	99.5283	1831310	461500	EL,DL					1573	2135	2232	2328
Phillips Pet	Kincaid, F.T.	3	**2995**	826	Sep-50	H. Sotelo	377	A-	438				500	FSL 1500 I		42-463-00084	H-9-24	294	YP-6960-3	8S-4E-1			29.0928	99.5164	1835080	458290	DL					1690	2380	2470	2550
Wilcox H.F. O&G	Morris Bros etal (Woodley)	1	**3090**	758	Feb-38	M. Carrillo	380	A-	116				9553	E 330 S SW	Cnr Svy		379	295	YP-6961-1	8S-5E-3			29.1125	99.4759	1848060	465930	DL					1620	2220	2290	2410
Humble O&R	Kincaid	1	**5627**	810	Dec-24	H. Sotelo	370	A-	239								H-9-9		YP-6961-2	8S-5E-2	Dup of Michelson Kincaid-1						PDL								1680
Michelson (Howeth)	Kincaid, E.D., Sr.	1	**5627**	729	Aug-63	Hall	370	A-	239	BEL	Hosston		3400	15 mi S Sabinal				296	YP-6961-2	8S-5E-2			29.1029	99.4534	1855230	461880	EL					2360	2360	2482	2550
Gorman Drlg	Woodley Ranch	B-1	**2990**	790	Sep-60					Q16;13YP	LoEc	16000 ac	FNE	Cnr 37	U28			297	YP-6961-2	8S-5E-2	29.1246	99.4352							IEL		0 r	1;4		1786	2208	2302	2393
Gorman Drlg	Woodley Ranch	B-4	**2405**	768	Sep-60	Baker	776	A-	62	Q28	Eds	16000 ac	4500	F'EL	U29			298	YP-6961-2	8S-5E-2	29.1244	99.4198							IEL		0 r			1713	2141	2240	2331
Gorman Drlg	*Woodley Ranch*	*8*	***1500***	*795*	*Feb-64*	*Huizar*	*379*	*A-*	*235*		*AC*		*3200 FW*	*3700 FN*				299	*YP-6961-3*	*8S-5E-1*							*IEL*					*1222*			
Gorman Drlg	Woodley Ranch	B-5	**2430**	833	Oct-60	Doyal	1017	A-	1167		Eds		5780	FNE 7200	NRvr			300	YP-6961-3	8S-5E-1			29.1243	99.4192	1866180	469640	IEL					1732	2126	2248	2387
Gorman Drlg	Woodley Ranch	B-7	**2175**	782	Oct-60	Doyal	1017	A-	1167				2600	FW 3420	NRvr			301	YP-6961-3	8S-5E-1			29.1142	99.4184	1866420	465950	IEL					1633			
Flanagan & Perlman	Wilke, H.C.	1	**2005**	1463	Nov-49	H. Smith	221	A-	467	BEL			330	SE cnr Eds Co				302	YP-7032-3	4S-1W-1			29.6205	100.0201	1675900	651220	NF								
Phantom Oil	Cloudt M.D.	1	**2710**	1511	Dec-25	GC&SF	661	A-		BEL	Paleozoic			2 mi FWL 9 mi FNL	Uvl		A-9-1	303	YP-7032-8	4S-1W-8			29.5295	100.0856	1654780	618310	DL								
Great Western Drlg	Harris	1-A	**3856**	1116	Oct-83	Weymiller	628	A-	1282	BEL	Paleozoic?		660	2.75 mi NW Cline				304	YP-7048-7	6S-1W-9			29.2786	100.1020	1648700	527130	EL						212	304	405
Great Western Drlg	Harris	1-B	**6000**	1069	Nov-83	CCSD	273	A-	612	BEL	Paleozoic		660	3.5 mi NNE Cline				305	YP-7048-9	6S-1W-7			29.2885	100.0438	1667280	530550	EL								
	Kirchgraber F.			*1099*	Jan-51									NW of Asphalt Mtn on			G-6-2	306	YP-7056-202	7S-1W-2	*29.2206*	*100.0558*												
Wolters, O.	Kirchgraber	1	**1560**	*1099*	Dec-49	GC&SF	633	A-	954		Edwards		1200	15 mi W Uvalde				307	YP-7056-3	7S-1W-1			29.2183	100.0401	1668240	505020							676	858	
Wolters, O.	Kirchgraber	1ALT	**1560**	*1099*	Dec-49	GC&SF	633	A-	954					alt loc				308	YP-7056-2	7S-1W-2			29.2388	100.1158	1664160	511340							676	858	
Malone O&G	Watkins, C.S.	1	**1650**	1500	Mar-81	Weymiller	284	A-	1290				2211	14 mi W U		42-463-30291		309	YP-7056-3	7S-1W-1			29.2399	100.0100	1677900	512810									
Gulf Prod.	Smyth, J.B.	1	**2625**	950		A. Underwood	318	A-	506									310	YP-7056-5	7S-1W-5			29.2084	100.0487	1665480	501450									
Gulf Oil	Smyth, J.B.	1	**2672**	950	Jan-16	Underwood	318	A-	506		Glen Rose						G-6-1	311	YP-7056-6	7S-1W-6			29.1936	100.0341	1670080	496040	DL						1125	1205	1325
Pure	Smyth, J.B. & W.A.	1	**4810**	1200		GC&SF	687	A-	900	BEL	?			W of Dabney			G-9-1	312	YP-7056-7	7S-1W-9			29.1401	100.1102	1645600	476800	DL						1605	1710	1847
Pure	Smyth, J.B. & W.A.	2	**2445**	1150		GC&SF	687	A-	900								G-9-2	313	YP-7056-7	7S-1W-9			29.1343	100.1093	1645890	474690						*673*	1515	1615	1765
USGS	Texas Hwy Dept		**2140**	1070	Jan-57	Headrick	319	A-	247						U112		G-9-3	314	YP-7056-8	7S-1W-8	29.1628	100.0617							0	3					1510
Roberts	Kincaid	1-A	**705**	*899*	Jun-33			A-										315														*298*	*653*		
ZAVALA CO.—																																			
Continental	Fenley Est	1	**5550**	834	Nov-67	I&GN	99	A-	282	BEL				NW (	###			1	ZX-7064-4	8S-1W-4			29.0735	100.0809	1654750	452500	NF								
Cannon TP	Fenley & Sons	1	**5933**	*899*	Aug-45	I&GN	103	A-	286	BEL	Hosston							2	ZX-7064-5	8S-1W-5			29.0584	100.0511	1664220	446920	EL						2180	2300	2460
Sutton Prod	Flowers	1	**4750**	836	Jan-60	I&GN	114	A-	297	BEL	GR							3	ZX-7064-5	8S-1W-5			29.0617	100.0177	1674880	448040	EL						2237	2340	2490
Park & Phillips	Flowers & Ward	1	**7290**	826	Dec-50	I&GN	20	A-		BEL	Paleozoic			16 mi SW Uv				4	ZX-7064-6	8S-1W-6			29.0732	100.0061	1678620	452200	EL						2010	2123	2280
Tenneco	KB&M	1	**6576**	787	Mar-65	I&GN	6	A-		BEL	(Sligo)							5	ZX-6957-7	8S-1E-9			29.0151	99.9610	1692870	430950	NWF								
Southern Union	Kincaid	1	**5660**	877	Jul-74	AB&M	17	A-	14	BEL	Sligo							6	ZX-6959-5	8S-4E-5			29.0708	99.5428	1826600	450340	EL						2668	2756	2851
Andreen	Batesville	1	**5364**	690	Dec-73	Rowley	37	A-	560	BEL								7	ZX-6959-8	8S-4E-8			29.0210	99.5761	1815900	432270	NWF								
Bluebonnet	Kincaid EC	1	**5032**	792	Apr-50	Allen	374	A-	6	BEL	GR							8	ZX-6960-7	8S-5E-9			29.0339	99.4685	1850300	436280	EL						3250	3342	3430
Rowe	Kincaid etal	1	**6600**	800	Dec-64	Allen	374	A-	6	BEL	Sligo							9	ZX-6960-7	8S-5E-9			29.0262	99.5642	1819710	434140	EL						3400	3485	3571

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR D

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	T/McK B/RDM	T/McK B/Eds (T/GR)	T/Psl	T/Sligo	T/Hstn	T/Pz	Subsea— TAC	Subsea— T/Bu	Subsea— T/Eds (B/DR)	Subsea— T/Sil	Subsea— T/Pz	Isopachs— TAC-ED	Isopachs— TBU-ED	Isopachs— TED-RD	Isopachs— TED-BED	Isopachs— TED-TSL	Isopachs— TSL-TPZ	Remarks
FRIO CO.—																							
Tenneco - Pennzoil	Machen OW	1	**6410**	697	Jun-65			5630	6183				-2538	-2723	-5486			185			2763		
Amerada	Miller WB	1	**6393**	682			4220	5290	5803	6240			-2253	-2518	-5121			265		1020	2603		
Tenneco - Pennzoil	Goad TJ	1	**6542**	658	May-65		4685	5760	6290				-2789	-2978	-5632			189		1049	2654		
Tenneco - Pennzoil	Roberts	1	**7143**	644	Aug-65		4980	6340	6893				-3241	-3428	-6249			187		908	2821		
MEDINA CO.—																							
Skinner	Reilley, J	4	**2005**	*1099*																			
McCormick, HW	Amberson, J	1	**3056**	1040	Jul-45								430										
Roxanne	Rothe, T	1	**3281**	1117	Oct-53				2302		2960				-1185	-1843						658	
Ford, EJ etal	Nunley, RJ	1	**5033**	892	Dec-55																		
Fina	Faust, DF	1	**23316**	900	Mar-91																		
Gulf	Richardson, HF	1	**6955**	868	Feb-59		2265	3315	3741	3968	6200		-389	-597	-2873	-5332		208		800	2276	2459	
Ginther Warren	Corle, L	1	**4109**	771	May-62																		
Galaxy	Leoncita Land Co	1	**5130**	726	Sep-73		3350	4520	5000					-1744	-4274					880	2530		
Tenneco - Pennzoil	Hardie, E	1	**5352**	703	Apr-65		3501	4620	5112				-1695	-1867	-4409			172		931	2542		
Humble	Wilson	1	**7167**	725	Dec-44		3522	4768	5240	5490	6980		-1835	-2005	-4515	-6255		170		792	2510	1740	
UVALDE CO.—																							
Einstoss	Wardlaw Rch	1	**2515**	1792	Mar-41		400	1160	NR	1364	1735			1737	Nrec	57				345	Nrec		
Gulf Oil	Zesch etal	1	**5093**	1500	Oct-63				1448		2015				52							567	
Transcontinental	Patterson, W.B., Jr.	1	**3930**	1600	Dec-15		250	1290	1345	1355	1726				NRec						NRec		
Gulf Oil	Magruder etal	1	**7611**	1547	Jul-62				1015		1985				532	-438						970	
	Brown, J.R.		**995**	*1599*																			
Texas Co.	Mitchell, C.C. etal	1	**6503**	1668	Jan-49			750	908	931	1272				760	396						364	
Universal Pet	Mountain Eagle Rch	1	**2370**	1346	Oct-49			475			1132					214							
	Mason		**650**	1504	Jan-53		275																
	Mason, F.,Jr.		**385**	1332			250																
	Wynn.		**396**	1250																			
Smith, A.	Echols G		**1275**	*1199*	May-55																		
	Santleben, O.		**600**	1120	May-56		582																
	Fitzgerald, W.E.		**237**	1150	May-57		182																
Kucera & Kucera	Seidel, W.A.	1	**1815**	1082	Sep-55																		
	Seidel		**0**	1080										834									
Bishop?Seidel?	Seidel, W.A.		**1123**	1089	May-55		798																
	Seidel, W.A.		**674**	1092	May-55									912									
	Seidel & Sons		**0**	1090										865									
Gulf Oil	Fenley etal	1	**2280**	1221	Jul-63		1480							861						1120			
	Jackson, E.F.		**760**	1065	May-05									923									
	Mechler		**0**	1096										988									
	Bishop, David		**852**	1073										813									
	Rogers, D.		**880**	1060	May-56									652									
	Rogers, D.		**499**	1040	Apr-43									650									
	Nayak Aviation		**0**	1050										874									
	Bishop		**0**	1060										830									
	Truelove, Larry		**0**	1085																			
	Truelove, K.S.		**505**	1025	Jan-56									745									
	O'Bryant, M.		**800**	*1025*	Jan-56									560									
	Truelove, K.S.		**745**	*1070*	Jan-56									*930*									
	Chapman Grain Inc.		**767**	1185		380	641							1033					228	489			
	Henry, Ray H.		**0**	1071		440	688							905					274	522			
	Swanson, Dr. George		**0**	1192										1025									
TWDB	Sabinal Test Hole		**694**	1158	Jan-74	431	705							952					225	499			
	Henry, J.A.		**1600**	1027	Apr-33		1180							377						530			
	Rosenall, J.		**593**	1082	Jan-29									509									
	Ligosky, George		**483**	1033		462								907					336				
	Raney		**0**	970										575									
USGS (TDWR)	YP4 Test Well		**707**	1005		396	683							943					334	621			
	Pardi		**0**	1020		468	800							940					388	720			
	Pardi		**0**	1031		455								1006					430				
	Rambie		**0**	975										931									
	Speir		**0**	980		476								808					304				
	Hargrove, H.		**800**	1002	May-56	500								817					315				
	Watkins, C.		**389**	976	May-56									741									
	Stoy, P.		**370**	1005										655									
	Toone	1	**0**	985		310																	
	Toone	2	**0**	995		310																	
	Carnes		**0**	998										684									
Evans & Thompson	Farris	1	**1086**	1093																			
	Briscoe		**0**	1090										988									
	Hutcherson (Kolaya)		**560**	1081	May-52									976									
	Brigman, John		**759**	1047		411	760							927					291	640			
	Sanderlin		**0**	1068										978									
	Rimkus, Maurice		**837**	1031		591								735					295				
	Sanderlin, A.C.		**730**	1080	Jan-67		715							890						525			
T.W.D.B.	Rimkus, A.R.	3	**752**	1026	Jun-74	624								658					256				
	Verstuyft, R&M		**784**	1059	May-76									965									
	Stoy, P.		**518**	1037	May-55	425																	
	EUWD		**881**	1055	Sep-89	500	856							805					250	606			
	Thomas		**0**	1058										690									
	Ashby & Chinn		**535**	1036	Jan-39									726									
	Gilleland, L.		**888**	1031	May-71	460	825						1006	905			126	101					

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR D

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	T/McK B/RDM (T/GR)	B/Eds	T/Psl	T/Sligo	T/Hstn	T/Pz	Subsea— TAC	T/Bu	T/Eds (B/DR)	T/Sil	T/Pz	Isopachs— TAC-ED	TBU-ED	TED-RD	TED-BED	TED-TSL	TSL-TPZ	Remarks
	Meyer, W.		**506**	1012	Jan-56									600									
	Knippa City Well	2	**0**	1000										816									
	Niemeyer, H.O.		**850**	1022	Jan-67							987	827	702			285	125					
	McFatter, W.B.		**1000**	998	Jun-68									468									
	Knippa WSC		**1376**	985	Aug-62							309	68	-33			342	101					
	Ashby & Clown		**300**	979	<29																		
USGS	Knippa, Elmer		**1302**	978	Aug-73	961								304					287				
	Knippa City Well	1	**698**	1000	Mar-78									812									
EUWD	Knippa		**902**	1007	Sep-89																		
Prod'n Svc (Sorelle & Baker)	Kennedy, G.A.	1	**2865**	997	Apr-48	NL	NL	1770	2170	2320				*1127*	-1173								
Shell	Walcott	1	**855**	965	May-55									805									
Bell O&G	Wolcott (Walcott)	1	**3030**	965			1000		Nrec	2755			845	682	Nrec			163		717			
	Toone		**0**	984										892									
	Kramer, W.H.		**1235**	977	Jan-55							657	197	57			600	140					
	Kramer, W.H.		**988**	963	Mar-64									478									
	Knippa, E.		**916**	952	Jan-65							842	654	475			367	179					
	Knippa, EW		**1072**	956	Jul-69							*951*	631	464			*487*	167					
	Knippa, E.		**987**	970	Dec-70							*905*	780	610			*295*	170					
	Gilleland		**900**	970	Jan-82																		
	Friesenhahn, Lawrence		**1079**	948		1077								152					281				
	Posey		**1414**	977	Apr-64									284									
	Henkel, H.		**1476**	955	Nov-64							701	324	161			540	163					
	Reagan, R.		**813**	962	Aug-68								694	535			427	159					
	Reagan, R.		**1471**	959	Jan-63									214									
	Zinsmeister		**1298**	955	Nov-65																		
	Zinsmeister		**365**	940	Nov-62		1260					735	385	335			400	50					
	Woodley, TM, Jr		**1010**	948	Aug-67							743	468	289			454	179					
	Bratcher		**1305**	939	Aug-67							729		94			635						
Able Irrig.Co.	Able Irrig.Co. (Bracher, RC)		**1311**	930	Nov-52									-15									
	Whites Mines		**946**	975	Jan-26							*929*	573	410			*519*	163					
	Knippa- S.Tx. Aggregate		**0**	980										424									
	Lang, R.		**1246**	947	Mar-69							642	268	105			537	163					
	Bratcher		**1289**	933	May-53									93									
	Knippa, E. (Miyakawa)		**1473**	957	Jan-74									503									
	Miyakawa		**1408**	970	Apr-74	930						861	452	298			563	154	258				
	Carnes, Eddy		**1196**	932	Jun-86							201	132	52			149	80					
	Meyer, A.		**455**	1027										602									
	Meyer, L.		**420**	1023										542									
	Kelly, Ray		**880**	1043		552								728					237				
	Verstuyft, Roger & Martin		**0**	1043										911									
	Ward		**0**	1002										274									
	Ward, Jess		**0**	1002										342									
	Ward, Jess		**1455**	972		1021	1401							232					281	661			
	Woodley	2	**0**	1000										460									
	Knippa, G.		**862**	992	Jan-68							787	442	268			519	174					
	Faulkenberg, E.		**943**	998	Nov-69							878	518	363			515	155					
	Woodley K.K.		***89***	*978*	*Jan-29*																		*AC, TDS 1329*
	Niemeyer, V.		**1081**	1004	Jul-69								642	484				158					
	Woodley, T.M., Jr.	3	**1322**	994	Oct-77							709	459	309			400	150					Srp 100-285
	Woodley, T.M., Jr.	4	**1165**	1000	Aug-78							910	600	485			425	115					
	Dornbush, A.		***100***	*971*	*Mar-85*																		*52-100 Srp*
	Niemeyer, V.		**994**	986	Jan-64									296									
	Faulkenberg, E.		**1380**	971	Apr-65							721	341	101			620	240					
	Dornbush, P.		**1500**	974	Jan-64																		Srp 110-TD, D&A
	Sunny Clime Farm		**1640**	961	Jan-65									0									
	Knippa, G.		**1514**	988	Mar-68							857	353	193			664	160					Dry Hole', WL -60
	Woodley, Mack Jr.		**1550**	1002	Nov-71	1343						882	112	-28			910	140	313				
	Miles, JE		**1660**	935	Jan-62									2									
	Herndon, L.		**1604**	931	Apr-63									-27									
	Briscoe		**1685**	935	Sep-67	1270	1605					830		17			813		352				
	Herndon		**1794**	922	Jan-64							372	7	-158			530	165					
	Herndon, W.L.		**1330**	935	Jan-28									-59									
	Mosing(4M Ranch)		**1579**	949			1533							-349						235			
	Regan, C.		**1520**	912										2									
	Saunders, Dan		**1765**	951	Jul-67									120									
	Traugott, RE		**1450**	930	Jul-65									79									
	Reagan, C.		**1629**	925	Sep-67									-9									Bad DL
	Sanders			956	Jan-64																		
	Reagan, C.		**1125**	926																			
	Reagan, C.		**1650**	895	Dec-72								95	-49				144					
	Reagan, C.		**1200**	926	Jun-86								126	46				80					
	Wooton		**0**	936										100									
Word, T.T.	Braden, Quinn	1	**1200**	906	Aug-34							421	-23	-171			592	148					
	Owens Est		**1165**	866	Jan-34																		
	SAWS Uvalde	2	**1560**	892	Mar-99							612	0	-173			785	173					

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR D

As of May 24, 2005

						T/McK						Subsea—					Isopachs—						Remarks
Company	LWName	Wll No	TD	Elev (KB)	Date	B/RDM	B/Eds (T/GR)	T/Psl	T/Sligo	T/Hstn	T/Pz	TAC	T/Bu	T/Eds (B/DR)	T/Sil	T/Pz	TAC-ED	TBU-ED	TED-RD	TED-BED	TED-TSL	TSL-TPZ	
Ferguson	Hashknife Ranch		**1828**	992		0	0							-230									
	Sabinal City Well		**2700**	954	Jan-19		1647					654	189	39			615	150					
	White, S.		**1161**	934	Mar-65							651	181	13			638	168					
	Griffin, J.		**1150**	920	Jan-66									10									
	City of Sabinal		**1493**	*954*	Jan-19									24									
	City of Sabinal	3	**1211**	953	Jan-53							603	40	-67			670	107					
	City of Sabinal		**1499**	954	Oct-87	1170	1490					514	186	40			474	146	256	576			
	Roberts		**1368**	935		1220								-35					250				
	Peyton & Roberts		**1384**	932	Nov-63							272	99	-56			328	155					
	Schudde, EG		**1465**	922	Dec-66									-118									
	Schudee, Jerry		**1526**	915	Jan-67									-185									
	Rehm, Russell		**1510**	914	Oct-65							244	-46	-202			446	156					
Locke-Wood	Braden	1	**1160**	860	Jul-34							310	-70	-220			530	150					
	Gulley, J.		**1531**	898										-222									
	Halbardier, Charles		**1657**	910		1294								-145					239				
	Pepper		**1706**	915	Apr-67								17	-147			1062	164					srp&chlk 85-805
	Braden		**1685**	894	Jul-65							320	-106	-249			569	143					srp 180-460 in Nv??
	Braden, J.J.		**1675**	885	May-67							386	-93	-254			640	161					srp 108-305 top Ty
	Wiebolt, Werner		**1655**	901	Jan-66									-289									
	Owens, Roy			910	Jan-53																		
USGS	Nelson, S.G. Fee	Q-4	**1910**	885	Dec-57	1545						195	-150	-295			490	145					
	Henderson, Sam		**1280**	903	Jan-66									-277									
Pan American	Smyth, W.H.	1	**3686**	876	Jul-63	*1960*	2415					508	-377	-602			1110	225	482	937			
	Clements, B.		**809**	939	May-48									339									
	Duvall, Everett		**874**	937										331									
	OKM Ranch		**1402**	958	Jul-73		1300					888	418	292			596	126					80'trap over EF
	Ramsey Est		**0**	937										770									
	Ramsey		**602**	941	May-54									767									
	Daly, C.		**800**	925										775									
	Monigan, J.		**800**	928										563									
	Stoy, P.		**295**	932	Apr-29									717									
DUP of U152??	Monagin		**0**	928										663									
	Brown, J.D.		**0**	928										812									
	Heine, W.		**137**	927										799									
	Miyakawa		**360**	938										658									
Humble O&R	Anderson, L.	1	**5015**	951	Dec-34		370	1900	2340	2550	3482			*1181*	-1389	-2531				*600*	2570	1142	
	Berry, Roger		**0**	935										863									
	Casey, O.V.	2	**0**	932										905									
	Casey, O.V.	3	**0**	*935*										*891*									
	Royall, Jess		**0**	938										858									
	Raney, R.V.		**157**	901										762									
	Puccini, J.E.		**4226**	912										647									
	Uvalde City Well		**637**	925	May-57									845									
	McFatter, D.		**0**	925										826									
	Anderson, Don		**0**	920										848									
	Baker, Jerry		**0**	950										831									
	Uvalde Equipment Co.		**161**	919										859									
City of Uvalde	City of Uvalde		**287**	905										645									
	Hagg		**221**	938										888									
USGS	Toone, Jane Kennedy	4	**568**	970										906									
	Olmitos Ranch		**550**	965										887									
	Knowles	1	**199**	936										804									
	Uvalde Equipment Co.		**160**	918										862									
	Casey, O.V.	1	**151**	935										919									
	Casey, O.V.		**180**	922										880									
	Casey, O.V.		**160**	925										912									
	Hutcherson, E.		**960**	936										176									
	Hoag		**1113**	943										68									
	Harlan, V.		**1200**	935	May-51									195									
	Winans, A.		**289**	910										680									
	Burns, J.H.		**387**	902										657									
	Burkett, A.L.		**430**	910	May-05									535									
	U.S.Fish Hatchery		**600**	912	May-50							852	562	377			475	185					
	U.S.Fish Hatchery		**750**	913	Apr-37									258									
USGS	Fry, Halden		**0**	910										624									
USGS	Herndon, Louis		**0**	910										688									
USGS	Pogue, J.C.		**0**	910										614									
USGS	Thomson, J.O.		**0**	910										585									
	Hancock, D.H.		**863**	900	Apr-27							840	775	610			230	165					
	Painter, W.R.		**562**	880	May-56							845	560	395			450	165					
	Capt, E.E.		**640**	898	Apr-28									498									
	Sutherland, E.L.		**225**	880	May-50									655									
	Hoag, W.		**350**	882	May-54									657									
Cheyenne O&G	Willoughby Est	3	**1995**	910	Feb-81																		

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR D

As of May 24, 2005

						T/McK						Subsea—					Isopachs—						Remarks
Company	LWName	Wll No	TD	Elev (KB)	Date	B/RDM	B/Eds (T/GR)	T/Psl	T/Sligo	T/Hstn	T/Pz	TAC	T/Bu	T/Eds (B/DR)	T/Sil	T/Pz	TAC-ED	TBU-ED	TED-RD	TED-BED	TED-TSL	TSL-TPZ	
	Willoughby, Don		**893**	938		633								298					-7				
	Farr, Bo		**0**	915																			
	Briscoe Farm		**0**	888																			
	Sheedy, Nolan		**0**	907																			
	Farr, J.R.		**604**	914	May-48							*906*	529	359			547	170					
	Estes, W.O.		**600**	894	May-56									471									
Branham EA etal	Downie, A.E.	1	**3016**	991	Jul-64	*860*	1157	2490	2720	2910			FO?		-1729				346	613			LF/650?
	Garvis March		**0**	960										742									
Century O&G	Houston, J.L.	1	**2440**	952																			
	Newell		**1492**	965	May-53		825							835						695			
	Williamson Dickie		**0**	941										868									
	Winn, Pete		**0**	968										794									
	Winter Garden Chems (McGlothlin)		**0**	955										931									
	Faber Spires		**0**	955										856									
City of Uvalde	Water Well	B-12	**0**	943										917									
Pan American	Houston, Alice T.	1	**2602**	958	Jul-63	300	685	1920	2342	2537				888	-1384				230	610	2272		
Howeth, Ike	Winslow, F.	1	**3688**	919	May-60	1013	1216	2360	2825	2910				358	-1906				307	653	2264		
	Herndon		**273**	960										730									
Humble O&R	Winslow, F.		**620**	956	Apr-38		544					FO	FO	676						264			
	Winslow, A.		**700**	918	Jan-69									468									
	Agape Ranch		**750**	950	Apr-80								890	624				266					
	Brown, Lloyd		**630**	965	Aug-79							905	705	545			360	160					
	Neimeyer		**0**	910										540									
	Winslow, A.		**1050**	906	Jan-68							746	536	448			298	88					
	Carter		**0**	923										683									
Phillips Pet	Houston Core Test	1	**4032**	933	Jan-50	*380*	860	2090	2542	2737	3885			777	-1609	-2952			224	704	2386	1343	
	Carter (Sims)		**370**	937										617									
Fred Ehlers	Ehler		**740**	875																			
Phillips	Hoag (Turner)		**1560**	883										678									
	Carnes		**630**	890										770									
	Turner, B.		**350**	894	Jan-08									724									
	Hargrove		**0**	885										675									
	La Moca Ranch (Hargrove)		**2309**	866	May-62		1310							298						742			
	Turner-Johnson		**800**	877										625									
	Hargrove, Joe		**566**	865																			
	Hargrove, Joe		**605**	850																			
SAWS	SAWS Uvalde	3	**1400**	876	Apr-99								258	108									
Pan American	Jernigan, Neil,Sr.	1	**3000**	957	Jun-63	602	900	2137	2550	2705			877	737	-1593		220	140	382	680	2330		
	Briscoe		**1010**	868										178									
B&S Drlg Co	Reeder	2	**1705**	862	Jul-57							-698		*-1314*									
	Herndon		**0**	910										280									
	Briscoe		**1571**	899	Jan-68		1561							-12									
	Briscoe		**1494**	899	Jul-68		1441							-6									
	Briscoe		**1556**	888	Apr-66							628	188	12									
SAWS	SAWS Uvalde	1	**1500**	882	Dec-98									-103									
	Turner, B.		**1410**	875	Jan-52									69									
	Turner-Johnson		**1262**	877	Sep-66									207									
	Johnson, Pat		**1400**	875	Oct-73									33									
SAWS	SAWS Uvalde	4	**1463**	867	Jun-99							604	104	-68									
Intl. Nuclear	Kincaid Ranch	2	**4416**	850	Dec-68	*1924*	2280	3710	4170	4386		-42	-546	-725	-3320		683	179	349	705	2595		
Steeger, WJ, etal	Kincaid, F.T.	2	**4000**	888	Dec-61	*2100*	2624	3860				-206	-687	-864			658	177		872			
Tenneco - Pennzoil	Kincaid, F.T.	1	**4569**	800	Aug-69	*2130*	2670	3827	4286	4500		-409	-870	-1030	-3486		621	160		840	2456		
	Maner		**0**	815										-725									
	Woodley, F.		**2632**	784	Jul-66		2535							-1331									
	Woodley, F.		**2242**	782	Dec-66									-1250									
Wilcox O&G	Woodley, T.M.		**3090**	750	Jan-38		=Morris Bros well					-960	-1440	*-1650*			690	210					
	Ingrum, R.P.		**653**	962	May-52									327									
Bennett & Sorrels	Rehm M.	1	**4505**	835	Jan-47	1420	1785	2840	3290	3490	4500	288	-73	-225	-2455	-3665	513	152	360	725	2230	1210	Oper. Atlantic in Welder list, TD 4490
Roberts, J.W.	*Thien, W.D.*	*1*	***1000***	*844*	*Jan-61*																		
Green JA	Kennedy & Nunley	1	**3511**	825	Dec-46		1830					275	-260	-420			695	160		585			
Bennett & Sorrels	Rehm, M.	1	**4505**																				
Bennett & Sorrels	Rehm, M.	1	**4505**																				
Gorman Drlg	Woodley Ranch	1	**2517**	752	Jun-60	2272						-565	-953	-1158			593	205	362				
Gorman Drlg	Woodley Ranch	2	**3911**	757	Jul-60	2280	2698	*3870*				-553	-929	-1152			599	223	371	798			
Gorman Drlg	*Woodley Ranch*	*4*	***1598***	*743*	*Aug-60*							-629		*-1228*									
Gorman Drlg	*Woodley Ranch*	*5*	***1539***	*753*	*Aug-60*																		
	Woodley	2	**2575**	746	Jan-60									-1159									
	Woodley, F.		**1990**	739	Sep-64							-161	-1056	-1176			1015	120					37C, 454 TDS
Gorman Drlg	Woodley Ranch	B-11	**4548**	860	Mar-64	2620	3118	4390				-663	-1095	-1251			588	156	509	899			
Gorman Drlg	Woodley Ranch	B-9	**2430**	851	Mar-61							-862	-1291	-1471			609	180					

UVALDE COUNTY WELLS - PENETRATING AUSTIN OR D

As of May 24, 2005

Company	LWName	Wll No	TD	Elev (KB)	Date	T/McK B/RDM (T/GR)	B/Eds	T/Psl	T/Sligo	T/Hstn	T/Pz	Subsea— TAC	T/Bu	T/Eds (B/DR)	T/Sil	T/Pz	Isopachs— TAC-ED	TBU-ED	TED-RD	TED-BED	TED-TSL	TSL-TPZ	Remarks
Gorman Drlg	Woodley Ranch	B-10	**2292**	812	Mar-61							-1018	-1206	-1381			363	175					Most AC serp
Union Oil	Anderson	1	**3775**	825	Dec-06		2039					150	-475	-585			735	110					
Brown & Root	Project Mohole	1	**3479**	840	Dec-64																		
	General Tire Co.		**2325**	890		2067								-716					461				
General Crude Oil	*Kincaid, F.T.*	*2*	***1380***	*896.53*	*Feb-66*							-473.5											
Steeger, WJ, etal	Kincaid, F.T.	1	**4015**	856	Jul-61	*2795*	3122					-644	-1143	-1322			678	179	617	704			
General Crude Oil	*Kincaid-State*	*1*	***1176***	*870*	*Feb-66*							-170											
Ballard etal	Kincaid	1	**2832**	*899*																			
General Crude Oil	*Kincaid, F.T.*	*1*	***1366***	*823*	*Feb-66*																		
Humble O&R	Kincaid	3	**2300**	800	Jan-25							-639	-1180	-1368			729	188					
Intl. Nuclear	Kincaid Ranch	1	**4890**	773	Dec-68	2330	2850	4090	4560	4780		-583	-1051	-1222	-3787		639	171	335	855	2565		
Phillips Pet	*Kincaid, F.T.*	*1*	***1960***	*785*	*Apr-50*																		
Phillips Pet	Kincaid, F.T.	2	**2955**	807	Aug-50							-766	-1328	-1521			755	193					2953 TD
Phillips Pet	Kincaid, F.T.	3	**2995**	826	Sep-50							-864	-1554	-1724			860	170					
Wilcox H.F. O&G	Morris Bros etal (Woodley)	1	**3090**	758	Feb-38							-862	-1462	-1652			790	190					
Humble O&R	Kincaid	1	**5627**	810	Dec-24							810		-870			1680						
Michelson (Howeth)	Kincaid, E.D., Sr.	1	**5627**	729	Aug-63	2980	3360	4610	5097	5335		-1631	-1631	-1821	-4368		190	190		810	2547		
Gorman Drlg	Woodley Ranch	B-1	**2990**	790	Sep-60	2819						-996	-1418	-1603			607	185	423				
Gorman Drlg	Woodley Ranch	B-4	**2405**	768	Sep-60							-945	-1373	-1563			618	190					
Gorman Drlg	*Woodley Ranch*	*8*	***1500***	*795*	*Feb-64*							-427											
Gorman Drlg	Woodley Ranch	B-5	**2430**	833	Oct-60							-899	-1293	-1554			655	261					
Gorman Drlg	Woodley Ranch	B-7	**2175**	782	Oct-60							-851											
Flanagan & Perlman	Wilke, H.C.	1	**2005**	1463	Nov-49																		
Phantom Oil	Cloudt M.D.	1	**2710**	1511	Dec-25			1198	1295	1330	1690				216	-179						395	
Great Western Drlg	Harris	1-A	**3856**	1116	Oct-83		1300	2230	2670	2750	3630		904	711	-1554	-2514		193		895	2265	960	
Great Western Drlg	Harris	1-B	**6000**	1069	Nov-83			2230	2540		3445				-1471	-2376					2540	905	
	Kirchgraber F.			*1099*	Jan-51																		
Wolters, O.	Kirchgraber	1	**1560**	*1099*	Dec-49									241									
Wolters, O.	Kirchgraber	1ALT	**1560**	*1099*	Dec-49									241									
Malone O&G	Watkins, C.S.	1	**1650**	1500	Mar-81																		
Gulf Prod.	Smyth, J.B.	1	**2625**	950	A.																		
Gulf Oil	Smyth, J.B.	1	**2672**	950	Jan-16	*1820*	2078						-175	-375				200					
Pure	Smyth, J.B. & W.A.	1	**4810**	1200		*2320*	3145	4040	4325				-405	-647	-3125			242	473	1298	2478		
Pure	Smyth, J.B. & W.A.	2	**2445**	1150								477	-365	-615			1092	250					
USGS	Texas Hwy Dept		**2140**	1070	Jan-57									-440			1510	1510					
Roberts	Kincaid	1-A	**705**	*899*	Jun-33								246										
ZAVALA CO.—																							
Continental	Fenley Est	1	**5550**	834	Nov-67																		
Cannon TP	Fenley & Sons	1	**5933**	*899*	Aug-45	3020	4010	5050	5520	5750			-1281	-1561	-4621		2460	280	560	1550	3060		
Sutton Prod	Flowers	1	**4750**	836	Jan-60	3010	3500						-1401	-1654			2490	253	520	1010			
Park & Phillips	Flowers & Ward	1	**7290**	826	Dec-50	2785	3270	4760	5223	5460	7240		-1184	-1454	-4397	-6414	2280	270	505	990	2943	2017	
Tenneco	KB&M	1	**6576**	787	Mar-65																		
Southern Union	Kincaid	1	**5660**	877	Jul-74	3440	3730	5070	5544				-1791	-1974	-4667		2851	183	589	879	2693		
Andreen	Batesville	1	**5364**	690	Dec-73																		
Bluebonnet	Kincaid EC	1	**5032**	792	Apr-50	4100	4380						-2458	-2638			3430	180	670	950			
Rowe	Kincaid etal	1	**6600**	800	Dec-64	4242	4500	5830	6370				-2600	-2771	-5570		3571	171	671	929	2799		