

TABLE 1

LIST OF WELLS USED FOR DETERMINATION OF
POROSITY- Δt RELATIONSHIP OF SHALES

<u>Well</u>	<u>Location</u>
Imp. Avon Hill	12-15V-30-22-W3
Amerada Cdn. Sup. Ferrier	10- 7-41- 8-W5
IOE Galaxy	10- 8-110-5-W6
B.A. Calling Lake	6-36-71-23-W4
NCO Richmond (Sonic)	6-29-18-27-W3
NCO Richmond (F.D.)	11-10-18-27-W3
Pan Am A-1 Algar River	4-13-87-17-W4
Mule Creek Yorkton	14-28-27- 3-W2
Pan Am D ₁ Chipewyan	10-16-91-18-W4
Texaco IOE Buffalo	10-15-85-22-W4
Pan Am A-1 Frog Lake	10-29-58- 2-W4
Dome Provo Zama N	10-14-117-4-W6
B.A. Zama North	2-16-117-4-W6
B.A. HB Zama North	5-30-116-4-W6

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GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA

OTTAWA

1971

A.	1.	I.O.E. Pan Am Boundary	14-21-84-13W6
	2.	C.& E. Pacific Doe Creek	6-10-82-13W6
	3.	I.O.E. et al. Clear River	10- 5-84-11W6
	4.	T.P.C. & O. et al. Clear River	10-30-83-11W6
	5.	T.P.C. & O. et al. Clear River	14-21-84-10W6
	6.	Altair H.B. Josck	7-24-82-10W6
	7.	C.D.R. Royce	2-12-83- 8W6
B.	8.	I.O.E. Peace Grove	10-16-84- 5W6
	9.	Union et al. Dunvegan	7-13-81- 5W6
	10.	Amerada Crown C.D. Bingo	5-35-82- 3W6
	11.	Samedan Decalta Berwyn	2-36-82-25W5
C.	12.	K.C.L. Teun Roma	10-36-83-23W5
	13.	Garvey et al. Cadotte	6-36-85-19W5
	14.	Shell Peace River	13-25-83-17W5
	15.	Can. Delhi et al. Cadotte	5-32-83-16W5
	16.	Imp. et al. Heart R.N.	2- 9-83-15W5
D.	17.	H.B. Union Lubican	10-24-86-13W5
	18.	R.O. Corp. et al. E. Lubican	4-32-83-12W5
	19.	Texaco Pan Am Lubican S.	2-32-83-11W5
	20.	I.O.D. Chevron Lubican River	2-27G1-84-10W5
	21.	I.O.E. B.A. Loon Lk. S.	12-15-85- 9W5
	22.	I.O.E. Bat Lake	15- 8-84- 8W5
E.	23.	Uno-Tex Red E.	4- 3-87- 8W5
		Uno-Tex Red E.	12- 4-87- 8W5
	24.	Uno-Tex B.A. Red E.	11-33-86- 8W5
	25.	Home et al. Red Earth	4-16-87- 7W5
	26.	B.A. PASTECHO River	2-30-79- 4W5
	27.	I.O.E. Trout River	10-30-83- 3W5
	28.	Pan Am A-1 Doucette	7-28-78- 2W5
F.	29.	I.O.E. Corn Lake	4- 3-88-25W4
	30.	I.O.E. Buffalo River	4-32-85-23W4
	31.	Sun Pan Am Wabasca	10- 5-83-21W4
	32.	C.N.D.-S.U.P. Mink	10-16-90-20W4
	33.	Pan Am B-1 Chipewyan	8-32-91-19W4
		Pan Am 2 Chip Strat	8-35-91-19W4
	34.	Pan Am D1 Chipewyan	10-16-91-18W4
		Pan Am E1 Chipewyan	10-34-91-18W4
	35.	Champlin Pa McKay	10-32-88-15W4

G.	36.	Amerada C.D.N. -S. U. P. Rrewster	4-26-42-11W5
	37.	Dekalf Crimson	7-36-42-10W5
	38.	Amerada C.D.N. -S. U. P. Crimson	12-29-42- 9W5
	39.	Amerada C.D.N. -S. U. P. Ferrier	10- 7-41- 8W5
	40.	Amerada Crown	CG6- 5-42- 7W5
	41.	Amerada Crown Cy. Will. Gr. Willcan Will. Gr.	6-21-41- 7W5 6-36-41- 7W5
H.	42.	Amerada Crown D.J. Minhik	7-23-45- 6W5
	43.	Climax Will. Gr.	16-16-42- 6W5
	44.	Apache Placid Carl Gilby Apache Placid Carlos	4-35-41- 5W5 12-35-41- 5W5
	45.	G.R.T. P.L.N.S. Minhik	6- 4-46- 5W5
	46.	Tenn Marathon Al Pendryl	10-16-46- 4W5
	47.	Skelly A-1 Pendryl	12- 6-45- 4W5
	48.	Calstan Wenham	4-34-46- 3W5
	49.	Joe Phillips Wrose S.	1- 4-45- 1W5
I.	50.	Forgotson-Burk Sgspike	15-33-50-27W4
	51.	S.O.B.C. Imp. Leduc	10-11-50-26W4
	52.	Midwest et al. Blackmud	8- 7-51-24W4
	53.	N.U.L. Oliver	10- 4-54-23W4
	54.	N.U.L. Fort Saskatchewan	10-33-54-22W4
	55.	Ashiand Anax Ardrossan	12-34-52-22W4
	56.	S.O.B.C. C.S. Camrose West	10- 3-50-22W4
J.	57.	H.H.S. - C.P.O.G. Tawayik C.P.O.G. Chipman	12- 9-53-19W4 10-22-53-19W4
	58.	N.U.L. Beaverhill Lake	10-27-52-19W4
	59.	Canso et al. Lamont	10-25-55-18W4
	60.	C.P.O.G. Chipman	10- 2-53-18W4
	61.	C.P.O.G. Dusty Lake	11-12-48-18W4
	62.	Altair Lloyd Hilliard	1- 5-54-17W4
	63.	H.L. Hunt Mundare	12-11-53-17W4
K.	64.	Scurry Hairy Hill	10-24-55-14W4
	65.	Canpet Mont Imp. Ispas	4-26-57-13W4
	66.	B.A. Spedden	11-23-59-12W4
	67.	Sun Imp. Lottie	10- 2-59-11W4
L.	68.	B.A. Mallaig	7-26-60-10W4
	69.	Triad Dev-Pal Therien	7-25-60- 9W4
	70.	Imp. Lac. Canard	12-10-57- 9W4
	71.	Triad Dev-Pal Glendon	11-31-60- 7W4
	72.	Triad Dev-Pal Kehiwin	10-34-59- 7W4
M.	73.	Cansalt Linbergh Cansalt Linbergh	6-10-58- 5W4 4-18-58- 5W4
	74.	Pan Am A-1 Muriel Lake	10- 5-59- 4W4
	75.	Imp. Beaverdam	5-16-60- 2W4
	76.	Pan Am A-1 Frog Lake	10-29-58- 2W4

	77.	Husky Blackfoot Lloyd	10A- 2-50- 2W4
	78.	B.A. Sputinow	13C- 3-58- 1W4
		B.A. Sputinow	16A-27-58- 1W4
N.	79.	Imp. Beaver River	14-23-60-27W3
	80.	Imp. Worthington	8-28-58-27W3
	81.	Imp. Cold Lake East No. 1	6-23-64-26W3
	82.	Imp. Ministikwan	9- 3-59-26W3
	83.	Imp. Oldman Lake	2- 9-54-26W3
	84.	Imp. Northern Pine	16-16-63-25W3
	85.	Cigol Amerada Watson Lake	10- 5-60-22W3
O.	86.	C.P.O.G. Milk River Ridge	10-12- 4-20W4
	87.	Uno-Tex. H.B. Iron Springs	10-36-10-20W4
	88.	C.P.O.G. New Dayton	5-30- 4-18W4
	89.	L.-M. Turin	6-34-10-18W4
	90.	C.P.O.G. Taber	11-26- 9-17W4
	91.	Barons C.P.O.G. Taber North	4-33-10-16W4
	92.	Loc. et al. Tabern	2- 5-11-16W4
P.	93.	C. and E. Fincastle	15-17-10-15W4
	94.	Gridoil Hays	2- 9-13-13W4
	95.	C.P.O.G. Tilley	2-27-16-13W4
	96.	Empire St. et al. Bantry E.	4- 3-17-12W4
	97.	Gridoil Bow Island Burdett 1	4- 8-11-11W4
	98.	Gridoil C.F. Illingworth	10-10-13-11W4
		B.A. Grand Forks	10-21-13-11W4
	99.	Calstan C.P.R. Kininvie	4-17-17-11W4
		Suptst et al. Monogam	12-28-17-11W4
Q.	100.	Kerr McGee Princess	10-24-20-10W4
	101.	Home et al. Suffield	3-27-13- 9W4
	102.	R.O. Corp. Monogram	10-29-16- 9W4
	103.	Empire St. et al. Jenner	10-27-19- 9W4
	104.	Empress Suffield	10- 5-14- 8W4
	105.	Empire St. et al. Jenner	4-33-20- 8W4
	106.	Pembina Midcon. Med. Hat	6-25-13- 6W4
	107.	Dev.-Pal. P.O.R. Acadia	6- 2-24- 4W4
	108.	Baysel et al. Bindloss	10-32-20- 2W4
R.	109.	N.C.O. Richmond	6-29-18-27W3
	110.	Husky Marengo	7-29-27-27W3
	111.	Oliphant N.W. Gorefield	10-18-24-26W3
	112.	Imp. Bayhurst	7-22-24-25W3
	113.	C.D.R.S. Sceptre	2- 3-21-24W3
	114.	Continental Avon Hill Dodsland	10-31-30-22W3
		Imp. Avon Hill	12-15V-30-22W3
	115.	Williamson Shackleton	2-21-18-20W3

S.	116.	Kissinger Rancho Herschel	13-17-30-17W3
	117.	Rothwell Socony Matador	1-15-21-15W3
	118.	Imp. Rossduff	4- 2-24-10W3
	119.	H.B. Mobil Log Valley	16- 4-20- 8W3
	120.	H.B. Sunkist	12-18-21- 8W3
	121.	C.D.R. Eyebrow	4-15-21- 2W3
	122.	Sifto Salt (1960) Tugaske Placid Sifto Tugaske	4-10-23- 2W3 2-10-23- 2W3
T.	123.	Placid Allen	4-29-32-28W2
	124.	Porcupine Prime Imp.	8-28-27-26W2
	125.	Alwinal Mohawk	1-10-33-24W2
	126.	Scurry Boulder Lake	1-24-30-23W2
	127.	K.R. Nokomis	16- 2-30-21W2
U.	128.	N.P.C. Touchwood	1-18-31-18W2
	129.	Miami H.B. Quill Lake	13-22-30-16W2
	130.	Atlantic Raymore	16- 6-29-15W2
	131.	Scurry Foam Lake	5-31-30-12W2
V.	132.	Shell Insinger	5-28-29- 9W2
	133.	B.A. Invermay	1-29-31- 7W2
	134.	Mule Crk. Yorkton	14-28-27- 3W2
W.	26.	B.A. Patecho River	2-30-79- 4W5
	28.	Pan Am. A-1 Doucette	7-28-78- 2W5
	135.	Pan Am. G-1 Marten Hills	6-32-75- 1W5
	136.	B.A. Calling Lake	6-36-71-23W4
	137.	Champlin Flat Lake	11-35-65-20W4
	138.	Tenn C. and E. Flat Lake	1-31-65-19W4
	139.	C.P.O.G. Perrgvale	11-20-63-21W4
X.	140.	C.P.O.G. Viking	10-29-45-10W4
	141.	Home et al. Hardisty	10-30-42- 9W4
	142.	C.P.O.G. Kess	10- 9-40- 8W4
	143.	Mobil C.P.O.G. Brownfield	11-15-38-12W4
	144.	Dynamic et al. Provost	10-30-35- 3W4
	145.	B.A. Royalite Calthorpe	10-16-32- 1W4
	146.	Mobil Oyen	10- 4-30- 2W4
Y.	147.	S.M.P.S. Gull Lake	3- 7-13-18W3
	148.	Texaco Scotsguard	2-32-10-16W3
	149.	Amax et al. Chamberry	4-17- 7-18W3
	150.	International Helium Wood Mountain	10- 3- 5- 8W3

TABLE 2 List of wells studied

TABLE 3 Mudstone porosity and permeability
data of well cores in Japan & Canada

Well	Depth	Lithology	Permeability (md)	Porosity	Permeant
Obuchi stratigraphic well (Japan)	1454 m	Mudstone	9.9×10^{-3}	0.257	8,000 mg/l
	2036	do	1.2×10^{-2}	0.203	NaCl
	2488	do	1.0×10^{-2}	0.150	solution
	3049	do	9.1×10^{-3}	0.127	.
	3053	do	8.6×10^{-3}	0.152	
	4033	do	0	0.065	
Kambara GS-1 (Japan)	1029 m	Mudstone	-	0.390	
	1609	do	-	0.332	
	1808	do	7.7×10^{-3}	0.266	10,000 ppm
	2005	do	9.9×10^{-3}	0.311	NaCl
	2151	Sandy mudstone	3.0×10^{-2}	0.246	solution
	2295	Mudstone	7.3×10^{-3}	0.243	
	2608	do	1.0×10^{-3}	0.218	
	3062	do	2.6×10^{-3}	0.196	
	3206	do	2.0×10^{-4}	0.188	
	3503	do	1.3×10^{-3}	0.159	
	3701	do	8.0×10^{-4}	0.146	
Kambara GS-2 (Japan)	1000 m	Siltstone	4.9×10^{-2}	0.399	10,000 ppm
	1255	Mudstone	1.4×10^{-2}	0.427	NaCl
	1501	Sandy Mudstone	1.6×10^{-2}	0.377	solution
	1763	Mudstone	2.3×10^{-2}	0.294	
	2508	do	6.0×10^{-3}	0.246	
	3500	do	7.0×10^{-3}	0.122	
	4103	Sandy mudstone	8.0×10^{-3}	0.080	

Well	Depth	Lithology	Permeability (md)	Porosity	Permeant
Yuza GS-1 (Japan)	807 m	Siltstone	2.1×10^{-2}	0.427	} 8,000 mg/l NaCl solution
	1008	do	2.4×10^{-3}	0.382	
	1198	Mudstone	8.4×10^{-3}	-	} 22,000 mg/l NaCl solution
	1398	do	1.2×10^{-3}	0.241	
	1614	do	1.3×10^{-3}	0.187	} 14,000 mg/l
	1966	do	1.0×10^{-3}	0.163	
	2201	do	6.0×10^{-4}	0.161	
	2402	do	5.0×10^{-4}	0.153	
	2586	do	4.0×10^{-4}	0.164	
	2816	do	1.0×10^{-4}	0.180	
Strathmore 7-12-25-25-W4 (Alberta)	770 ft	Shale	1.6×10^{-4}	0.195	} 32,000 ppm NaCl solution
	777	do	1.0×10^{-6}	0.205	

TABLE 4

MINERAL IDENTIFICATION

STRATHMORE 7-12-25-25-W4

(by A. E. Foscolos)

<u>Depth (feet)</u>	<u>Order of Abundance</u>
600	Montmorillonite, quartz, feldspar, illite, kaolinite.
700	Montmorillonite, quartz, feldspar, illite, kaolinite.
800	Montmorillonite, quartz, feldspar, illite, kaolinite.
820	Quartz, feldspar, montmorillonite, illite, kaolinite.
899	Quartz, montmorillonite, feldspar, illite, kaolinite.
998	Montmorillonite, quartz, feldspar, kaolinite and illite.
1100	Quartz, montmorillonite, feldspar, trace of kaolinite and illite.
1118	Quartz, feldspar, siderite, montmorillonite, kaolinite, trace of illite.
1200	Quartz, feldspar, kaolinite, montmorillonite, traces of illite and calcite.
1300	Quartz, feldspar, kaolinite, montmorillonite, trace of illite.
1378	Quartz, feldspar, montmorillonite, kaolinite, traces of illite, calcite and domomite.
1425	Quartz, siderite, feldspar, traces of montmorillonite, kaolinite and illite.
1500	Quartz, feldspar, montmorillonite, kaolinite, illite, dolomite, siderite, traces of calcite and pyrite.
1600	Quartz, feldspar, kaolinite, montmorillonite, illite, pyrite and trace of calcite.
1700	Quartz, kaolinite, illite, feldspar, montmorillonite, trace of calcite, siderite and pyrite.
1740	Quartz, montmorillonite, feldspar, kaolinite, illite, pyrite and calcite.
1800	Quartz, montmorillonite, feldspar, kaolinite, trace of illite.
1900	Quartz, feldspar, montmorillonite, kaolinite, trace of illite, calcite, dolomite and siderite.
2000	Quartz, dolomite, illite, kaolinite, feldspar, calcite, trace of chlorite, siderite and pyrite.
2080	Quartz, dolomite, feldspar, illite, kaolinite, montmorillonite, calcite, traces of chlorite, siderite and pyrite.
2100	Quartz, montmorillonite, feldspar, kaolinite, illite, trace of calcite.
2200	Quartz, montmorillonite, feldspar, kaolinite, illite and trace of calcite.

<u>Depth (feet)</u>	<u>Order of Abundance</u>
2300	Quartz, feldspar, kaolinite, montmorillonite, illite, trace of calcite and dolomite.
2400	Quartz, feldspar, montmorillonite, kaolinite, illite and trace of calcite and dolomite.
2520	Quartz, feldspar, montmorillonite, kaolinite, illite and trace of calcite, dolomite and pyrite.

TABLE 5

LIST OF WELLS STUDIED

A. Wells on Sections A-G

C.D.R. PROPHET	a-61-J, 94-G-14
C.D.R. PAC. SINC. PROPHET	d-21-B, 94-J-3
PURE PAC. TENAKA	c-94-L, 94-J-2
TRIAD ET AL JACKFISH	c-13-I, 94-J-7
P. JACKFISH TRIAD SOHIO	a-30-K, 94-J-8
B.A. SHELL KIJA	b-68-G, 94-J-9
B.A. SHELL KIJA	b-49-F, 94-J-9
CLARKE L. W. NAT. I.M.P.	b-78-J, 94-J-9
PAC. GUNNEL	b-5-D, 94-I-13
PAC. UTAHN	a-83-C, 94-I-13
PLACID FRONT YOYO	d-95-H, 94-I-13
W. NAT. ET AL YOYO	b-29-I, 94-I-13
KEWANEE UNO-TEX YOYO	a-49-L, 94-I-14
W. NAT. ET AL LOUISE	d-100-E, 94-P-3
ATLANTIC PAC. E. KOTCHO	b-19-G, 94-P-3
DOVE ET AL HELMET	a-59-J, 94-P-7
WILLIAMSON PAC. BOUGIE	d-31-F, 94-G-15
PURE IMP. BULL.	b-67-J, 94-J-1
FINA ET AL SWAT	a-81-A, 94-J-8
SOC. MOBIL SWAT	b-50-F, 94-I-5
TRIAD UNO-TEX NOGAH	c-78-H, 94-I-12
MOBIL W. SAHTANEH	c-89-I, 94-I-12
SOC. MOBIL S. SIERRA	a-98-K, 94-I-11
SOC. MOBIL SIERRA	c-78-C, 94-I-14
KERR McGEE ET AL SIERRA	a-27-F, 94-I-14
S.O.B.C. CALSTAN. PEGGO	b-74-A, 94-P-7
BAYSEL N. BISTCHO	12-25-123-7-W6
SINCLAIR C.D.N. AT. CALVAN	d-12-K, 94-G-2
PAN AM DOVE SIKANNI	b-43-B, 94-G-7
SINCLAIR ET AL KAHNTA	b-70-J, 94-G-7
PAN AM DOVE GREEN	d-76-I, 94-G-7
PAN AM DOVE MEDANA	c-26-H, 94-G-10
C.D.N. S.U.P. FINA ALUM TRUTCH	a-75-C, 94-G-16
SINC. ET AL N. CONROY CR.	d-45-K, 94-H-12
AMERADA ET AL FONTAS	a-61-K, 94-I-3
TEXACO N.F.A. TOWNSOITOI	d-44-C, 94-I-10
SOHIO C.&E. EKWAN	a-55-G, 94-I-10
PAC. SHEKILIE	b-24-A, 94-I-16
CANSO ET AL BISTCHO L.	10-27-119-6-W6
CANSO ET AL BISTCHO L.	12-20-122-4-W6
PLACID ET AL E. BISTCHO	5-4-124-2-W6
TEX. TEXCAN	d-71-I, 94-B-15
SINCLAIR PAC. N. JULIENNE	c-54-H, 94-G-2
SINCLAIR ET AL BEG	b-99-B, 94-G-1
PAC. I.M.P. S. JEDNEY	b-99-H, 94-G-1
PAC. SUNRAY IMPERIAL	b-44-J, 94-G-1

PAC. SUNRAY IMP. BUBBLES
PAC. I.O.E. LAPRISE
PAC. IMP. LAPRISE
DOME PROSPER MARTIN CR.
TEX. N.F.A. BLACK CR.
CIGOL TRIAD CONROY
WHITEROSE ET AL SLAVE
ARCO PAN. AM. BEDJI
I.O.E. TEKLO
C.D.R. JUNCTION
D.D.R. UNION ZAMA L.
PLACID ZAMA
B.A. ZAMA L.
HAMILTON ZAMA
SUN ET AL BERNADETTE
SUN ET AL BLUEBERRY
FARGO ET AL E. BLUEBERRY
C.D.R. UNION E. FIREWEED
ALTAIR SARCEE C. & E. ZEKE
TEX. N.F.A.S. WARGEN
PURE R.O.C. MIKE
TEXCAN DONIS
UNION KCL. R.O.C. BEARBERRY
UNION ET AL HIGHLAND
TENN. C.D.N. S.U.P. DAHL
SICLAIR PAC. CHINCHAGA
H.B. UNION CHINCHAGA
C.D.N. DELHI FOULWATER
C.D.N. DELHI ET AL FONTAS
TREND I.O.E. RAINBOW S.
I.O.E. S. RAINBOW
H.B.E. RAINBOW
SHELL ET AL RAINBOW L.
PACIF STODDART
WHITE ROSE SECURITY MONTNEY
I.M.P. ET AL RIGEL
I.M.P. FINA RIGEL
I.O.E. FINA N. RIGEL
AMAX ET AL LYNX
CIGOL CRUSH
UNION H.B. SINC. PAC. CRUSH
UNION H.B. B.A. LADYFERN
H.B. CAL. STD. ADSKWATIN
MOBIL CHINCHAGA E.
PURE CHINCHAGA R.
BANFF I.O.E. ET AL HAIGR
C.D.N.-S.U.P. C. & E. SUN BEDE

d-55-I, 94-G-1
a-85-D, 94-H-5
a-29-E, 94-H-5
c-18-H, 94-H-5
c-51-L, 94-H-6
a-70-H, 94-H-12
b-57-B, 94-H-14
c-32-E, 94-I-1
c-77-D, 94-I-8
6-12-109-11-W6
7-23-110-12-W6
5-1-111-9-W6
11-7-113-8-W6
10-14KR-116-5-W6
8-1-88-25-W6
d-30-K, 94-A-12
a-22-B, 94-A-13
d-55-H, 94-A-13
c-34-L, 94-A-14
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11-10-86-20-W6
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d-48-H, 94-H-1
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10-20-100-7-W6
2-9-100-6-W6
14-5-104-2-W6
2-29-105-1-W6

I.M.P. PAC. PARKLAND	10-28-81-15-W6
I.M.P. PAC. ARGUS	16-32-82-15-W6
I.M.P. PAN. AM. CHERRY PT.	6-26-83-13-W6
I.O.E. PAN AM BOUNDARY	14-21-84-13-W6
I.M.P. PAC. BOUNDARY	14-17-85-13-W6
I.M.P. PAN AM NEPTUNE	6-8-85-12-W6
I.O.E. PAN AM NEPTUNE	10-7-86-11-W6
PAN AM IMP A-1 CLEAR R.	11-16-87-11-W6
SHELL WORSLEY	6-18-87-9-W6
H.B. UNION B.A. CLEAR HILLS	2-1-89-8-W6
UNION NOTIKEWIN R.	12-1-92-5-W6
I.O.E. LOVET	7-32-94-4-W6
MOB. SHELL HOTCHKISS	10-2-95-2-W6
SHELL BOTTA R.	10-19-96-1-W6

B. Other Wells Studied

SHELL BOTTA RIVER	10-19-96-1-W6
MOBIL SHELL HOTCHKISS	10-2-95-2-W6
SHELL HOTCHKISS	16-24-94-2-W6
IOE LOVET	7-32-94-4-W6
UNION NOTIKEWIN RIVER	12-1-92-5-W6
HB UNION BA CLEAR HILLS	2-1-89-8-W6
HB UNION BA CLEAR HILLS	13-15-89-9-W6
SHELL WORSLEY	6-18-87-9-W6
PAN AM IMP A-1 CLEAR R.	11-16-87-11-W6
IOE PAN AM NEPTUNE	10-7-86-11-W6
IMP PAN AM NEPTUNE	6-8-85-12-W6
IMP PAC BOUNDARY	14-17-85-13-W6
IOE PAN AM BOUNDARY	14-21-84-13-W6
IMP PAN AM CHERRY POINT	6-26-83-13-W6
IMP PAC ARGUS	16-32-82-15-W6
IMP PAC PARKLAND	10-28-81-15-W6
MOBIL W. SAHTANEH	c-89-I, 94-I-12
SOCONY MOBIL S. SIERRA	a-98-K, 94-I-11
SOCONY MOBIL SIERRA	c-78-C, 94-I-14
KERR McGEE ET AL SIERRA	a-27-F, 94-I-14
SOBC CALSTAN PEGGO	b-74-A, 94-p-7
BAYSEL N. BISTCHO	12-25-123-7-W6
BA NORTH BISTCHO	6-13-123-10-W6
ROY AM CESS SUN BISTCHO	1-4-126-6-W6
SOCONY MOBIL SWAT	b-50-F, 94-I-5
TRIAD UNO-TEX NOGAH	c-78-H, 94-I-12
UNION ET AL DUNVEGAN	7-13-81-5-W6
FINA ET AL SWAT	a-81-A, 94-J-8
PURE IMPERIAL BULL	b-67-J, 94-J-1
WILLIAMSON PACIFIC BOUGIE	d-31-F, 94-G-15
PAN AM BEAVER RIVER A-3	c-45-K, 94-N-16
BA NORTH BISTCHO	6-12-123-10-6

HB BEATTY LAKE
HOME CHIEFCO BLUCR BISTS
CS ET AL BISTCHO
DOME ET ALL BISTCHO
BA NORTH BISTCHO
MOBIL ET AL PEPT
CS ET AL BISTCHO
AMAX CHEVRON N. BISTCHO
PLACID ET AL EAST BISTCHO
PLACID ET AL EAST BISTCHO
PAN AM BA A-1 THURSTON
CANSO ET AL BISTCHO
SKELLY BISTCHO A #1
CANSO ET AL BISTCHO
PAN AM BA A-1 STEEN
PAN AM BA A-1 BISTCHO S.
BA STEEN RIVER
IOE ATLANTIC SOUSA
PETCAL IOE BASSET
SCURRY-RAINBOW CLEAR HILLS
CDN-SUP C & E ZAMA
GPD CDN SUP OSBORN
WEST NAT. ET AL BLUEBERRY
PACIFIC SINCLAIR PEEJAY
UNION HB BEAVERDAM
UNION HUDSON's BAY SKWAT
IMP PAC SIRIUS
PACIFIC WEST PROD N. BUICK
UNION ASPEN
PACIFIC WEST PROD N. BUICK
CDR UNION PINTO
PACIFIC SR CANDEL N. PEEJAY
IMP PAN AM LABICHE
BA PAN AM KLENTIEH
PAN AM PHILIS
WEST NAT ET AL MILO
AMERADA SHELL CHEVES
WEST NAT ET AL EVIE
FRONTIER ET AL EVIE
PACIFIC ET AL CLARKE
FRONTIER ET AL EVIE
PACIFIC ET AL LUM
PACIFIC FORT NELSON
TEXACO TSEA
SOBC HELMET
WEST NAT. ET AL WILDBOY
PACIFIC KATHY
ATLANTIC PACIFIC NORTH KOTCHO
TEXACO NFA S. TSEA
CDN SUP ET AL NIG

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10-16-122-5-W6
15-27-122-5-W6
11-19-122-9-W6
11-15-123-1-W6
2-14-122-7-W6
7-4-123-10-W6
12-25-122-3-W6
10-20-123-2-W6
15-23-125-4-W6
9-13-121-4-W6
5-27-121-7-W6
10-5-122-6-W6
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SINCLAIR PACIFIC LICHEN CREEK
PLACID FRONTIER GUNNEL
DOME PROVO CEGO IMP SENTINEL
SINCLAIR ET AL DATCIN
ATLANTIC KYKLO
IMPERIAL KYKLO
WEST NAT. YOYO
PAN AM IOE A-1 BEARSKIN
DOME ET AL JUNIOR
UNO-TEX ET AL YOYO
IOE JUNIOR
ATLANTIC TEES
FOREST SRC IOE CEDAR
PACIFIC ET AL BIVOUAC
BANFF AQUIT CHASM
IMP FONTAS
IMP JUNIOR
AMERADA CROWN CD BINGO
C & E PACIFIC DOE CREEK
SAMEDAN DECALTA BERWYN
IOE ET AL CLEAR RIVER
ALTAIR HB JOSCK
CDR ROYCE
TPC & O ET AL CLEAR R.
IOE PEACE GROVE
BA HB UNION WORSLEY
SHELL WORSLEY
SUN PAN AM DIXONVILLE
CDR ET AL DIXONVILLE
TPC & O ET AL CLEAR RIVER
AMAX COOP N. BOUNDARY
ATLANTIC WARRENSVILLE
SHELL CLEAR HILLS
CHAMP ATLANTIC IMP HINES
IMP PAN AM BEAR CANYON
CDR ROYCE
PACIFIC ET AL WORSLEY
SUN E. OSBORN
IOE PAC INCA
PACIFIC WEST PROD STODDART
MARATHON BOUNDARY
DOME ET AL BOUNDARY
MONSANTO IOE FINA RIGEL
IMPERIAL PAN AM FLORAL
CEGO ET AL PEACE
FPC KILKERRAN
TGS ET AL MOBERLY
BA ZAMA NORTH
TENN. ET AL STEEN RIVER

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10-30-83-11-W6
10-16-84-5-W6
7-4-88-7-W6
2-25 JU-87-7-W6
2-16-87-2-W6
10-35-86-1-W6
14-21-84-10-W6
6-31-86-14-W6
6-30-87-1-W6
4-15-89-12-W6
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8-16-83-12-W6
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6-31-88-13-W6
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6-5-86-13-W6
16-35-83-15-W6
16-11-87-17-W6
10-20-84-12-W6
11-21-82-16-W6
11-36-78-15-W6
10-15-82-22-W6
2-16-117-4-W6
6-4-118-6-W6

PAN AM VARDIE #A1	9-20-115-8-W6
IOE VELA ZAMA	10-31-115-5-W6
CDN-SUP C & E ZAMA	4-10-112-6-W6
IOE COMMENT NORTH RAIN	8-7-111-7-W6
CDR. UNION NORTH RAINBOW	4-21-111-8-W6
HB ZAMA NORTH	4-1-116-6-W6
IOE SOUSA	6-28-111-4-W6
HUBER SCURRY PINN GALAXY	4-2-110-5-W6
CDR LITTLE HAY RAINBOW	7-15-112-10-W6
PAN AM BA A-1 FIRE	8-32-112-11-W6
HB ZAMA NORTH	13-7-116-4-W6
CHEVRON AMBER RIVER	1-12-118-7-W6
HOME ET AL CHIEFCO ZAMA N.	3-7-118-4-W6
PLACID SOUSA	6-29-110-4-W6
IOE GALAXY	14-2-110-5-W6
PLACID TEXACO ZAMA	10-25-112-9-W6
PAN AM B-1 MELVIN	6-33-115-15-W5
HOME AIMX CEGO MEANDER	2-25-113-18-W5
IOD IOE CEGO RENNIE	3-22-111-4-W5
CS-CEGO PONTON E.	10-17-112-12-W5
CDN-SUP DOME PROVO ZAMA N.	14-17-118-4-W6
IMP IOE CAPELLA	6-5-111-5-W6
PAC. PAN AM DOME N. BEG	d-37-D, 94-G-8
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BA ZAMA LAKE	3-1-116-8-W6
BANFF MOBIL RAINBOW WEST	2-18-110-8-W6
BAYSEL ET AL RAINBOW	2-8-110-8-W6
BANFF AQUIT BLACK CREEK	4-2-110-9-W6
IOE PAN AM HUBER NOVA	10-5-110-4-W6
CEGO SUN CABOT ZAMA	10-1-117-5-W6
FINA ZAMA	4-9-117-6-W6
MOBIL PRISM RAIN	4-13-110-6-W6
SHELL CLEAR HILLS	6-7-92-12-W6
SUN CHEVRON JIM CREEK	2-27-90-1-W6
PFC RICHFIELD DAIBER	c-98-D, 94-B-16
MOBIL RAINBOW	12-11-109-6-W6
BANFF MOBIL RAINBOW WEST	11-27-108-8-W6
IOE RAINBOW	13-20-107-9-W6
IOE ARCH	3-12-107-8-W6
HOMESTEAD ET AL RAIN S.	3-18-107-7-W6
BANFF AQUIT. LONG LAKE	6-3-107-6-W6
PENZL ET AL STEEN RIVER	3-19-119-2-W6
PLACID ET AL EAST BISTCHO	12-25-122-3-W6
IOE SOUSA	6-28-111-4-W6
BANFF MOBIL RAIN S.	5-4-108-10-W6
IMP PAC BOUNDARY	6-17-84-14-W6
BANFF MOBIL NONTA	7-35-109-7-W6

HB RAINBOW EAST	12-16-109-5-W6
TENNECO ET AL SPECTRUM	13-14-108-6-W6
BANFF MOBIL KITU	6-23-108-7-W6
PACIFIC ET AL WORSLEY	7-21-85-5-W6
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PURE ET AL DONIS	b-24-F, 94-H-2
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MOBIL PAN AM RAIN S.	3-34-106-8-W6
IOE CRESCENT RAIN S.	5-26-106-9-W6
HOME CHIEFCO BLUCR RAIN S.	7-18-105-7-W6
MOBIL SOUTH RAINBOW	6-14-105-6-W6
BAYSEL IOE ARGUS	2-34-104-8-W6
IOE PYRAMID	2-1-106-10-W6
MARATHON IOE FPC VENUS	7-31-102-9-W6
DCME PROVO IOE TARTAN	15-7-106-5-W6
BA ET AL SOUTH RAINBOW	7-16-106-6-W6
HUDSON'S BAY-B.A. BOUNDARY	6-1-100-11-W6
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WEST NAT. IOE S. CLARKE	d-29-K, 94-J-9
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MOBIL TEXACO BOTHA RIVER	6-22-98-5-W6
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SHELL CLEAR HILLS	16-17-90-12-W6
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MONSANTO IOE FINA RIGEL	11-19-87-16-W6
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PURE ROC PREPATOU
CDR HB UNION CHINCHAGA
PACIFIC PAN AM DOME JEDNEY
TEXACO NFA WARUS
CEGO ET AL FIATROCK
IOE ET AL FIATROCK
IMP PAC BOUNDARY
AMAX COOP N. BOUNDARY
HUBER ET AL BOUNDARY
PAN AM IOE B-1 CLEAR RIVER
SHELL CLEAR HILLS
SHELL IOE NOTIKWIN
MOBIL TEXACO MEIKLE RIVER
CDN-SUP WHITEHALL INGA
TENN A-1 SOUTH INGA
PACIFIC S. INGA
PACIFIC IOE CACHE CREEK
APACHE PAC W. STODDART
SUN BUICK
FRONTIER PEMBINA WOLF
MEDALLION CHARTER SAPPHIRE
UNION ARCO FIREBIRD
PACIFIC SR CANDEL WEASEL
UNION HB WILDMINT
CIGOL ET AL SNOWBERRY
UNION HUDSON'S BAY WILLOW
UNION HB WOODRUSH
UNION HUDSON'S BAY ALDER
AMARILLO ASPEN
AMARILLO GRONDPINE
UNION HB BA BOGBEAN
IOE FPC VENUS
TPC & O PURE BASSET LAKE
IOE BASSET
HOMESTEAD IOE BASSET
BA IOE NEGUS CREEK
HUDSON'S BAY CYPRESS
PACIFIC ET AL JEDNEY
PACIFIC IMPERIAL N. BUBBLES
PACIFIC SUNRAY IMP SOJER
TEXACO TEPEE
PACIFIC IMP LAPRISE
FOREST SRC IOE BEDJI
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BA ZAMA LAKE
IOE VIRGO ZAMA
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CDN SUP DOME ZAMA

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8-8-115-6-W6
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10-14-117-4-W6
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PENZL ET AL STEEN RIVER
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CDR UNION W. PINTO
WEST NAT. ET AL AITKEN
TENN MONSANTO NIG
TEXACO NFA NIG
TEXACO NFA NIG
IMP PAC SUNRAY WARGEN
IMP PAC SUNRAY WARGEN
TEXACO NFA WENDY
TEXACO NFA REDEYE
HB UNION IMP PADDY
IOE BEAVERSKIN
CDN-SUP FINA SABBATH
BANFF MOBIL RAIN S.
BANFF MOBIL TEHZE RAIN
BANFF MOBIL RAINBOW WEST
IMP IOE COMET
MOBIL HAY IK RAIN
CDN-SUP C & E HABAY
TEXCAN FOX
UNION HB MOOSE
AMAX ET AL SKWAT
CDN-SUP C & E SUN BEDE CK
PACIFIC SHEKILIE
TEXACO SHEKILIE RIVER
BAYSEL SOUTH BISTCHO
MOBIL ET AL SUDS BISTCHO
CANSO ET AL BISTCHO LAKE
MOBIL ET AL TURF BISTCHO
CS ET AL BISTCHO
CANSO ET AL BISTCHO LAKE
DOME ET AL BISTCHO
PLACID ET AL E. BISTCHO
HB BEATTY LAKE
APACHE PACIFIC FT. NELSON
PACIFIC ET AL CLARKE
PACIFIC ET AL CLARKE
PACIFIC ET AL CLARKE
GULF STATES ET AL FORT NELSON
PACIFIC IMP CLARKE
GULF STATES IMPERIAL
PACIFIC CHUATSE
C & E SOHIO MED KATHY
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