

TRIBAL GEOTECHNICAL SERVICES, INC.

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M E M O

DATE: July 27, 1987

WM Record File

101

WM Project

10

Docket No.

PDR

x LPDR (LB)

TO: Buck Ibrahim, NRC

Distribution:

Ibrahim

Linehan

FROM: Curtis Canard, TGS

(Re: WM, 623-SS)

Still

Wastler *W*

SUBJECT: Location of USGS refraction survey and industry seismic lines near Hanford Site.

As requested, I have enclosed a map showing the USGS refraction survey and a composite grid of industry seismic lines which were premitted during 1984-86.

Scouting reports indicate Shell Western is detailing some regional control approximately 25 miles northeast of Pasco, Washington. Two drillings permits are expected in this area this fall.

Also included are the following:

1. Interest letter from Integrated Geophysics Corporation concerning 21,000 miles of aeromagnetic data.
2. Order forms for Northwest Oil report.
3. Attendee list of recent Northwest Petroleum Association conference.

CC/jp

8712030122 870727
PDR WASTE
WM-10 PDR

Encl.

cc: Steve Hart w/seismic acquisition map only

2809



INTEGRATED GEOPHYSICS CORPORATION
1502 Augusta Dr. Suite 390
Houston, Texas 77057 713 • 780-4419

June 26, 1987

Curtis Canard
Council of Energy Resource
Tribes
3230 E. 77th Place
Tulsa, OK 74136

Dear Mr. Curtis:

Your interest in the Columbia Basin has been brought to our attention. I would like to inform you of our Aeromagnetic/Geologic interpretation of the area.

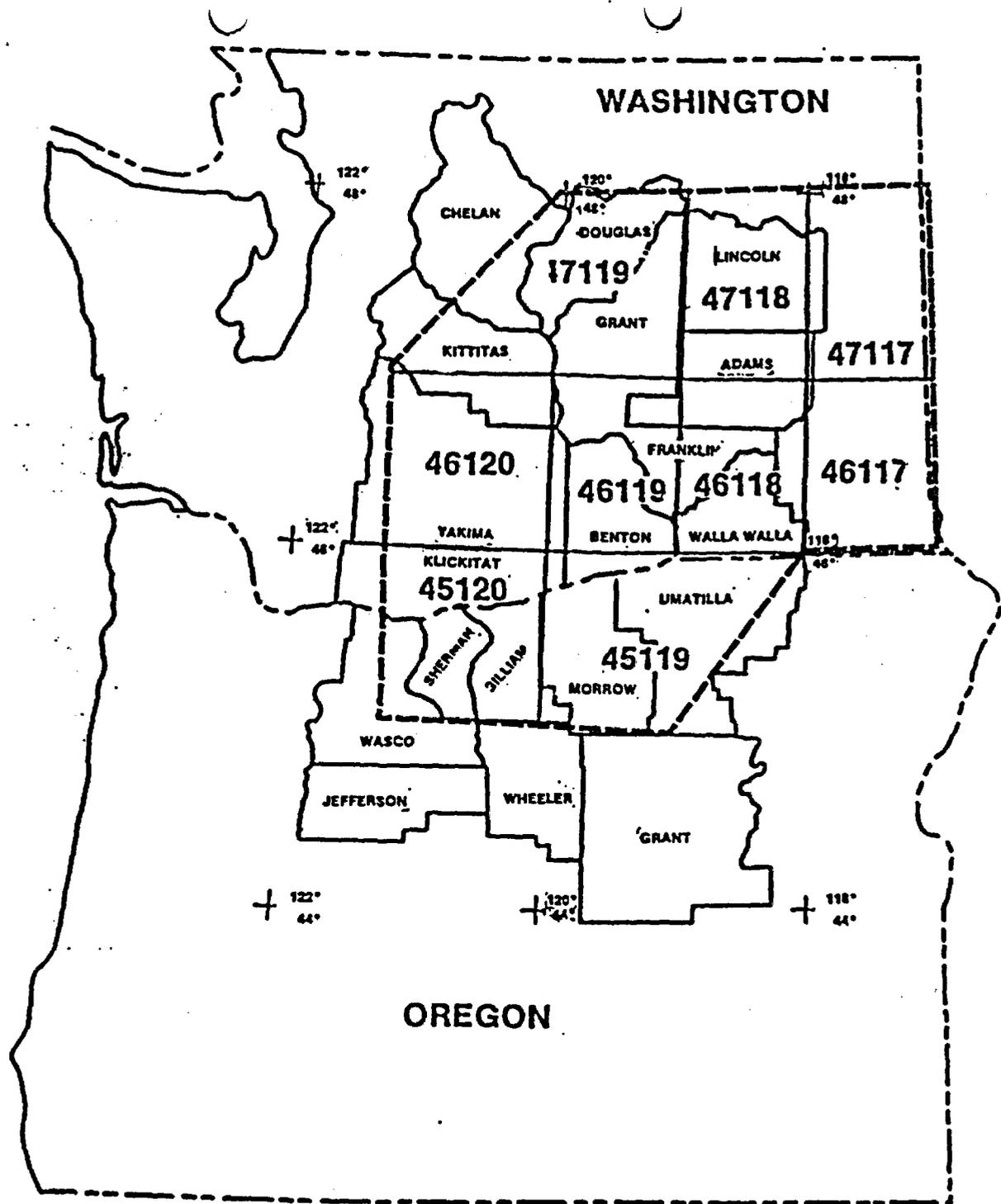
Integrated Geophysics Corporation has studied over 21,000 line miles of aeromagnetic data that uniformly traverse the Columbia River Basalt Plateau. In conjunction with northwest geologist Grant Valentine, our staff has complete a geological/geophysical study. The results have outlined several basins and graben structures. The thickness variations of basalt cover has been estimated from northern limit of Washington to central Oregon and from the Cascades to eastern border of Washington state.

We have also developed a historical reconstruction of the area based on the geophysical data, the geologic well information and the surface outcrops surrounding the plateau. The different types of basement composition derived are interpreted to have a correlation to the type of stratigraphy that can be expected.

I would like to send you more information about our interpretation package or answer any question you may have. Please call, if we can be of assistance in your exploration efforts.

Sincerely yours,

Corine Prieto



**COLUMBIA RIVER BASALT PLATEAU
AEROMAGNETIC SURVEY AREA**

INTEGRATED GEOPHYSICS CORPORATION

1502 AUGUSTA DRIVE SUITE 390
HOUSTON, TEXAS 77057 713-780-4418



Northwest Petroleum Association

P.O. Box 6679 Portland, Oregon 97228-6679

To All NWPA Conference Attendees:

We hope you enjoyed last month's conference in Bend. This mailing represents the last unfinished business of the conference and contains three items:

1. The much-requested list of attendees, including names and addresses.
2. Rufus Catchings' abstract for his report on interpretation of a seismic profile across the Columbia Basin.
3. David Faley's abstract of 1986-87 exploration activity. (David's report was presented in absentia by Andy Corcoran.)

The two abstracts were unavailable at the time of the conference.

Thanks for your participation!

Sincerely,

Barbara B. Portwood
Symposium Coordinator

NWPA SYMPOSIUM
May 17 - 19, 1987

List of Attendees

<u>Name & Title</u>	<u>Company</u>	<u>Address</u>
Adams, O. Clair Consulting Geologist	Rosewood Resources, Inc.	1800 S. West Temple, Ste. 202 Salt Lake City, UT 84115
Aguirre, Martin R. Graduate Student	Loma Linda University	4992 Sierra Vista Riverside, CA 92505
Barlow, James L. Manager - Minerals Leasing	Division of State Lands State of Oregon	1600 State St. Salem, OR 97310
Bartley, Ronald C. Consulting Geologist	Independent	1192 Beswick Way Ashland, OR 97520
Benson, G. T. Associate Professor	Dept. of Geology Portland State University	P. O. Box 751 Portland, OR 97207
Bodin, Philippe		2151 S. W. Laurel Portland, OR 97201
Bowen, Richard G. Editor	Northwest Oil Report	852 N. W. Albemarle Terrace Portland, OR 97210
Bressler, Alan Geologist	Meridian Oil Inc.	P. O. Box 1855 Billings, MT 59103
Brogan, Phil Consulting Geologist	Independent	1426 N. W. Harmon Blvd. Bend, OR 97701
Bruer, Wesley G. Consulting Geologist	Independent	190 S. 1st St., #3 St. Helens, OR 97051
Butler, Kim Exploration Geologist	Tenneco Oil	P. O. Box 9909 Bakersfield, CA 93389
Canard, Curtis Geologist	Council of Energy Resource Tribes	3230 E. 77th Place Tulsa, OK 74136
Catchings, Rufus D. Geophysicist	U. S. G. S. Office of Earthquake Studies	345 Middlefield Rd., MS 977 Menlo Park, CA 94025
Chauvel, Jean Paul Senior Exploration Geologist	UNOCAL	P. O. Box 6176 Ventura, CA 93006
Corcoran, R. E. Consulting Geologist	Independent	9551 S. W. 62nd Ave. Portland, OR 97219

Couch, Richard Professor	CONMAR Oregon State University	Corvallis, OR 97331
Covert, W. F. Manager	Cavenham Energy Resources Cavenham Forest Industries	1500 S. W. 1st, Ste. 570 Portland, OR 97201
Coxon, Donald A. Marketing Manager	Chiyoda International Corp.	1300 Park Place Bldg. Seattle, WA 98101
Cranswick, Scott		580 S. W. 1st, #10 Lake Oswego, OR 97034
Dady, William G. Geologist	Independent	Box 11 Wilsonville, OR 97070
Davis, Dennis L. District Geologist	Bureau of Land Management	Prineville, OR 97754
Deacon, Marshall		
Deacon, Robert J. Staff Geologist	Rockwell Hanford	P. O. Box 800 Richland, WA 99350
Farkas, Steve Professor of Geology	Central Washington University	P. O. Box 115 Ellensburg, WA 98926
Farooqui, Saleem	Cornforth Consultants	7440 Hunziker Rd. Tigard, OR 97223
Fisk, Lanny H. Assoc. Professor of Geology	Loma Linda University	Riverside, CA 92515
Flège, Fred Consultant - Gravity & Mag- netics	Independent	60639 Thunderbird Ct. Bend, OR 97702
Gaeth, Grant I.	Challenge Oil Co.	2800 S. University Blvd. #137 Denver, CO 80210
Gisler, Patrick M. Manager of Operations	Mustang Geophysical	20 N. W. Greenwood Ave. Bend, OR 97701
Gordon, Ian Student	Dept. of Geology Oregon State University	434 Bloss Hall Corvallis, OR 97331
Gullixson, C. Fred Geologist	U. S. Army Corps of Engineers	1509 N. E. 91st Circle #11 Vancouver, WA 98665
Henderson, V. Stephen	Dept. of Mineral Resources Bureau of Land Management	P. O. Box 2956 Portland, OR 97208-2965
Hensel, E. Gerald Exploration Geophysicist	Chevron, U.S.A.	6001 Bollinger Canyon Rd. San Ramon, CA 94583

Hook, John	John W. Hook & Associates	P. O. Box 3133 Salem, OR 97302
Johnson, Neal C. Exploration Geologist	Shell Western Exploration & Production	200 N. Dairy Ashford Houston, TX 77079
Jones, Richard L. Consulting Geologist	Independent	17451 S. E. Walnut Hill Rd. Amity, OR 97101
Ketrenos, Nancy J. Geologist	Dept. of Mineral Resources Bureau of Land Management	P. O. Box 2965 Portland, OR 97208
Kienlen, T. W.		5125 S. W. Scholls Fy. Rd. Portland, OR 97225
Kinzey, Howard G. Consulting Geologist	Independent	6701 12th St. East The Dalles, OR 97058
Kleinhans, Lew	Department of Geology Colorado School of Mines	Golden, CO 80401
Knapp, Randy Graduate Student	Loma Linda University	25262-B Davidson St. San Bernardino, CA
Knaup, William W. Exploration Supervisor	Mobil Oil Corp.	P. O. Box 5444 Denver, CO 80217
Kunkel, Bob		46-5 Estate Lilliendahl & Marienhof St. Thomas, VI 00802
LeMieux, Vincent J. Geophysicist	UNOCAL	2323 Knoll Dr. Ventura, CA 93003
Lightner, Jim Area Exploration Manager	Meridian Oil	P. O. Box 1855 Billings, MT 59103
Lingley, Bill Petroleum Geologist	Division of Geology & Earth Resources, State of Washing- ton	Mail Stop PY-12 4224 6th Ave. S.E. Lacey, WA 98504
Little, Steve Research & Technical Services	ARCO Oil and Gas Co.	2300 W. Plano Parkway Plano, TX 75075
Lovas, Susan Student	Central Washington University	Ellensburg, WA 98926
Metzger, Fred Area Geologist	ARCO Oil and Gas Co.	P. O. Box 147 Bakersfield, CA 93302
Meyer, H. J. Geologist	Oregon Natural Gas Develop- ment Corp.	220 N. W. Second Ave. Portland, OR 97209

Mickel, E. G. Regional Exploration Manager	Hunt Oil Co.	1125 - 17th St., Ste. 2400 Denver, CO 80202
Mohorich, Leroy M.	Dept. of Mineral Resources Bureau of Land Management	P. O. Box 2965 Portland, OR 97208-2965
Moses, Lynn J. Geologist	Rockwell Hanford	P. O. Box 1361 Richland, WA 99352
Newell, Charles O. Consulting Geologist	Independent	1030 Daisy Lane Tumwater, WA 98502
Newhouse, John Publisher	N. W. Oil Report	4204 S. W. Condor Portland, OR 97201
Nolf, Bruce Professor of Geology	Central Oregon Community College	2600 College Way Bend, OR 97701
Olson, Dixie M.		P. O. Box 2011 Salt Lake City, UT 84110
Peterson, James J. Student	Central Washington University	Rt. 3, Box 415 Ellensburg, WA 98926
Peterson, Robert E. Staff Geologist	Rockwell Hanford Operations	P. O. Box 800 Richland, WA 99352
Portwood, Barbara B. Geologist	Cavenham Energy Resources Cavenham Forest Industries	1500 S. W. 1st, Suite 570 Portland, OR 97201
Riddle, Alfred Student	Loma Linda University	25072 Barton Rd. Loma Linda, CA 92354
Robertson, Richard D. Consulting Geologist	Independent	1471 S. Ammons St. Lakewood, CO 80226
Rodgers, William L., Jr. Landman	Rodgers Oil and Gas Land Services	P. O. Box 344 Portland, OR 97207
Rudolf, Matthew C. Asst. Vice President	National Banking Dept. T21-6 Rainier National Bank	P. O. Box 3966 Seattle, WA 98124
Schassberger, Ruth Geologist		63545 Deschutes Market Rd. Bend, OR 97701
Schassberger, Ted Geologist		63545 Deschutes Market Rd. Bend, OR 97701
Schlicker, Herber G. President	H. G. Schlicker & Associates	7 S. E. 97th Ave. Portland, OR 97214
Sharp, George Director, Mineral Resources	Weyerhaeuser Co.	Tacoma, WA 98477

Sheets, Martin M. Owner	Independent	1973 W. Gray, Suite 4 Houston, TX 77019
Spencer, Philip R. Assoc. Geophysical Advisor	Mobil Oil Corp.	P. O. Box 5444 Denver, CO 80217
Sprong, Rosemary Office Manager	GEO Operator Corp. GEO Newberry Crater, Inc.	61419 S. Hwy. 97, Suite A Bend, OR 97702
Ialo Stephens Consulting Geologist	Independent	2215 N. W. Canterbury Dr. Roseburg, OR 97470
Stinson, Charles Vice-President - Operations	Oregon Natural Gas Develop- ment Corp.	220 N. W. Second Ave. Portland, OR 97209
Gloria Storch Landman	ARCO Oil and Gas Corp.	P. O. Box 147 Bakersfield, CA 93302
Steve Strong	CP Exploration, Inc.	17100 N. W. Joscelyn Beaverton, OR 97006
Swanberg, Chandler A. President	GEO-Newberry Crater, Inc.	61419 S. Hwy. 97, Suite A Bend, OR 97702
Thomas, Todd Field Operations Supervisor	Oregon Natural Gas Develop- ment Corp.	220 N. W. Second Ave. Portland, OR 97209
Valentine, Grant M. Geological Consultant	Independent	3400 Madrona Beach N. W. Olympia, WA 98502
Walkey, Cliff Projects Coordinator	GEO Operator Corp. GEO Newberry Crater, Inc.	61419 S. Hwy. 97, Suite A Bend, OR 97702
Wareham, Stephen I. Staff Petroleum Geologist	F&F GeoResource Associates	10850 Hole Ave., Suite B Riverside, CA 92515
Yates, Dolores	Energy Leasing	P. O. Box 393 Portland, OR 97207

Northwest Oil Report

OIL • GAS • GEOTHERMAL • SPECIAL PUBLICATIONS & INFORMATION SERVICE • CUSTOM MAPS

June 22, 1987

Curtis Canard
Council of Energy Resource Tribes
3230 E. 77th Place
Tulsa, OK 74136

Dear Curtis,

As one interested in the Pacific Northwest I believe you would find our publication and services to be useful, so I am sending you a brochure and some material on the well log and data base services we offer.

The Northwest Oil Report has been reporting on exploration activity in the Pacific Northwest frontier since 1959. It is published twice monthly and covers drilling activity, new well locations, geophysical work, federal oil/gas and geothermal lease applications. We also cover State and County lease sales in Oregon, Washington and Western Idaho. Special issues are mailed to subscribers whenever a significant energy related development occurs.

An important feature for persons following activity in the region are the background articles and maps covering new wildcats. These articles give nearby drilling history, geologic summaries and literature refernces.

The brochure gives more detail. If you would like more information give us a call.

Richard Bowen, Editor

John Newhouse, Publisher

WHO WE ARE

The Northwest Oil Report is a Portland, Oregon based information service that has been publishing a newsletter on exploration activity in the Pacific Northwest frontier since 1959.

In 1981 the company was purchased from the founding owner by C. John Newhouse and Richard G. Bowen. These principals have since introduced expanded news coverage of the region, upgraded the format and aggressively pursued additional services.

Our report is published twice monthly and is organized into four major categories.

- Latest Important Developments
- Oil/gas and geothermal drilling activity
- New well locations
- Leasing activity

Subscribers to the Northwest Oil Report and its products are major oil companies and large independents that rank within the top tier of the Fortune 500 companies and individuals that have a vested interest in the area.

The subscription rate to the report is \$400 per year. There are significant developments taking place in this frontier region that present excellent opportunities for informed participants. Next to having your own scout the Northwest Oil Report is your best way of receiving timely information.

The information provided here is intended to sketch an overview of the Report and its capabilities.

OUR NEWSLETTER

■ ARCO conducts intensive geophysical tests at Saddle Mtn. in the Columbia Basin.....

■ Nahma & Weagant file for Yamhill County, Oregon test.....

■ Shell Moves completion rig on Whiskey Dick, Washington location.....

■ Idaho lease sale grosses \$1,244,000 on 184,800 acres.....

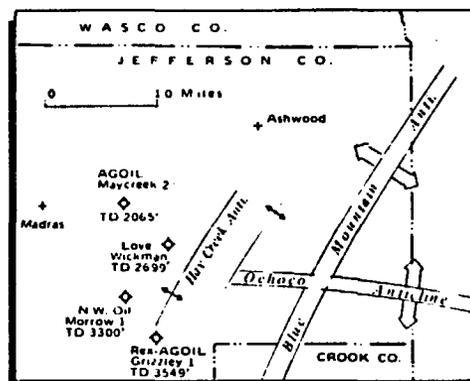
■ Shows reported at Florida Exploration, Douglas County, Oregon test.....

"These are just a few examples of the stories of important developments taking place in the Pacific Northwest. Fast breaking events that we are on top of and report to our readers in each issue of **Northwest Oil Report.**"

The strength of the Northwest Oil Report is in its familiarity with the geology and geography of the Pacific Northwest and the contacts it maintains with associates throughout the region.

An important feature for persons following activity in this frontier region are the background articles covering new wildcats. A typical news article is accompanied by a comprehensive map, geologic summary and nearby drilling history and bibliography.

Each issue covers oil/gas and geothermal drilling activity, new well locations, geophysical work, applications for federal oil/gas and geothermal leases and state and county lease sales in Oregon—Washington—western Idaho.



Structures from: Walker, G.W., 1977 Geologic Map of Oregon East of the 121st Meridian, U.S. Geol. Survey Misc. Geol. Inv. Map I-902, scale 1:500,000

PRODUCTS

WELL LOGS

In addition to the newsletter, our firm has entered into the well log reproduction service. We have available recent logs of Oregon and Washington. The originals in our library are direct reproductions of file copies held in the state archives. These logs can be ordered by clients as blue-line, sepia or vellum. Listings of new logs are carried in each issue of the newsletter and delivery of orders are made several days after release from the period of confidentiality.

WESTERN GAS-ENGINEERS Drilling Rate in ft/min Bit Rate	DEPTH	SAMPLE LITHOLOGY	OIL IN MUD or CUTTING FLUID ANALYSIS		% Good CU AR TOT WT
			Total Weight	SLURRY GAS	
	0				
	100				

COMPLETION CARDS

These cards, printed on 110 lb. card stock, contain extensive information on individual wells including formation tops, casing record, shows, tests, literature references and more. Our historic card library is continually updated as new information becomes available.

STATE OF OREGON		SU 10/W-5U	
CTV	FIELD	AREA	WELL
City Columbia	Col County 76	SEC 69'S & 66'W of	10-2614'
Oil Bachfield Energy Corp name	Col County 76	Sec. 10	6,742.4'
DATE 9/4/79	DEPTH 2333.16'	DATE 8/15/79	WELL 2333.16'
WELL 54' P 2304' W 150 cu., 2 3/8" tubing			
NO NAME			
Spud in Kennedy			
2225' Clark & Wilson - used			
logs: 6 holes/ft			
2240-2252, 2257-2267, 2273-2287, 2293-2297, 2303-2324, 2329-2330, 2334-2373			
W/B Choke tubing pres 800psi Csg pres 900psi			
Rate 6,300 MCY/D			
Reference: H. G. Bruff, 1960, "MIST GAS FIELD, Columbia County, Oregon"			
AAPC Pacific Sec. Meeting, Bakersfield, Published as preprint			
WELL LOCATION	Subsurface		
WELL LOGS	Western Geologists		
OPERATION	Taplar Drilling		

THE PRINCIPALS

C. John Newhouse Publisher

Co-owner of Northwest Oil Report and proprietor of Condor Cartographic Company. A 1962 graduate of Portland State College, Mr. Newhouse received a B.S. in Geography and has had an extensive background in earth science publications and cartography.

Mr. Newhouse accepted a position with the Oregon Department of Geology and Mineral Industries in 1962 as staff Cartographer and became increasingly responsible for the production of the department map series, technical reports and publications management. In 1970 he joined the U.S. Geological Survey, Publications Division, Western Region Headquarters at Menlo Park, California. During his eleven years with the Bureau, Mr. Newhouse served in a variety of positions in the Publications Divisional branches of Technical Operations, Plans and Production, Editing and management. His experience included that of cartography, quality assurance, interdisciplinary liason and printing/contracts officer.

Mr. Newhouse has attained membership in a number of professional and technical organizations including the Association of American Geographers, American Congress on Surveying and Mapping and the Northwest Petroleum Association.

4204 S.W. CONDOR
PORTLAND, OR 97201
(503) 224-2156

Northwest Oil Report

OIL/GAS AND GEOTHERMAL EXPLORATORY ACTIVITY

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- Geophysical Contr.
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- Investor
- Association
- Educational

PLEASE
CHECK
ONE