



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
Yucca Mountain Site Characterization Office  
P.O. Box 30307  
North Las Vegas, NV 89036-0307

QA: N/A

**JUN 26 2001**

OVERNIGHT MAIL

N. King Stablein  
High Level Waste & Uranium Recovery  
Division of Waste Management  
Office of Nuclear Material Safety & Safeguards  
U.S. Nuclear Regulatory Commission  
Two White Flint North  
Rockville, MD 20852

**SUBMITTAL OF PARTICIPANTS' MONTHLY PROGRESS REPORT**

As you have requested, the U.S. Nuclear Regulatory Commission is on distribution to receive a copy of the Yucca Mountain Site Characterization Project participants' monthly status report on a regular basis. Enclosed is the U.S. Geological Survey Progress Report for May 2001.

If you have any questions, please contact Bertha M. Terrell at (702) 794-1348.

A handwritten signature in cursive script that reads "Stephan Brocum".

Stephan Brocum  
Assistant Manager, Office of  
Licensing and Regulatory Compliance

OL&RC:BMT-1336

Enclosure:  
Ltr, 6/12/01, Craig to Trebules, w/encl

WM-11  
NM5507

JUN 26 2001

cc w/o encl:

J. J. Curtiss, Winston & Strawn, Washington, DC  
M. A. Lugo, BSC, Las Vegas, NV

cc w/encl:

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Irene Navis, Clark County, Las Vegas, NV  
Harriet Ealey, Esmeralda County, Goldfield, NV  
Leonard Fiorenzi, Eureka County, Eureka, NV  
Andrew Remus, Inyo County, Independence, CA  
Michael King, Inyo County, Edmonds, WA  
Mickey Yarbrow, Lander County, Battle Mountain, NV  
Jason Pitts, Lincoln County, Caliente, NV  
Judy Shankle, Mineral County, Hawthorne, NV  
L. W. Bradshaw, Nye County, Pahrump, NV  
Jerry McKnight, Nye County, Tonopah, NV  
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## United States Department of the Interior

U. S. GEOLOGICAL SURVEY  
Box 25046 M.S. 421  
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Denver, Colorado 80225

IN REPLY REFER TO:

INFORMATION ONLY

June 12, 2001

Victor W. Trebules  
Director, Office of Project Control  
Yucca Mountain Site Characterization  
Project Office  
U. S. Department of Energy  
P.O. Box 30307  
Las Vegas, Nevada 89036-0307

SUBJECT: Yucca Mountain Project Branch - U.S. Geological Survey (YMPB-USGS)  
Progress Report, May, 2001

Attached is the USGS progress report in the required format for the month of May, 2001.

If you have any questions or need further information, please call Raye Ritchey Arnold at (303)236-5050, ext 296.

Sincerely,

*for* Robert W. Craig  
Technical Project Officer  
Yucca Mountain Project Branch  
U.S. Geological Survey

## Enclosure:

cc: J. Bresee, DOE/OCRWM-HQ/Forrestal  
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# U.S. GEOLOGICAL SURVEY EXECUTIVE SUMMARY

May 2001

## GEOLOGY

Several aspects of geological work continued during the month. Compilation of borehole lithostratigraphy for deep boreholes in the Nye County Phase II early warning drilling program (EWDP) has been completed. Assembly of data for submittal of the data package is underway. At the request of representatives of BSC, results of interpretation of that borehole lithostratigraphy were presented in Las Vegas in a workshop held on May 23. Preliminary versions of hydrostratigraphic cross sections Nye-1 and Nye-2 also were completed and presented in digital format at that workshop. After minor revision, both sections will be submitted for technical review. Templates were constructed for development of a Nye-3 cross section. Compilation of lithostratigraphic workbooks continued during the reporting period.

In other geological work, mapping of the mine-back faces and new drift at Busted Butte continued. Review comments on borehole logs were received, and compilation of responses to those comments began.

## HYDROLOGY

### Unsaturated-Zone Hydrology

In work with surface-based UZ boreholes, the USGS continued to monitor pressure, temperature, and water potential at stations located in boreholes UE-25 UZ #4, UE-25 UZ #5, and USW NRG-7a. The data from UZ #4 and UZ #5 have been analyzed to provide infiltration estimates associated with the Winter 1998 El Niño rainfall events in Pagany Wash. The analysis was presented as a poster at the May 2001 High-Level Radioactive Waste Management conference and has been incorporated into a USGS WRIR and submitted for publication. At the request of the NRC, the shutdown of UZ borehole monitoring has been postponed until the NRC has reviewed the data and reached agreement that the program should be halted. Preparations for shutdown of power to those monitored boreholes continued, with focus on eventual closing calibrations for equipment used in the boreholes.

### Saturated-Zone Hydrology

Several aspects of work continued at the Alluvial Test Complex (ATC). Three flow meters used in single-hole testing at Nye County borehole NC-EWDP-19D1 were sent for closing calibrations in April after completion of pumping at the well. Closing calibrations for two of those instruments were completed. ParoScientific (Paro) transducers used during the testing remained in the borehole while Nye County was establishing a contract with a drilling company to remove the transducers, which would

then be sent for closing calibrations. That removal process is scheduled for the week of June 11, 2001. During June, the data spreadsheets and the data summary sheets for the ATC single-hole hydraulic testing are expected to be completed, with subsequent submittal to checking. Data-package work on the C-hole Prow Pass hydraulic test data continued, with work focused on resolution of checker issues. Software Routine Reports (SRRs) for all versions of the data-acquisition program used to collect hydraulic testing data remained in the approval process with the Software Configuration Management Group (SCMG). During May, USGS staff worked with SCMG to resolve review comments.

Multiple aspects of work in the modeling of the Death Valley regional flow system (DVRFS) continued, with focus on integration of data bases, on construction and improvement of the geologic model framework, and on flow modeling itself. Integration and analysis of the regional modeling data bases continued during the period. Development of the GWSI Utilities Verification Program continued, with work on the Visual Inspection part of the program to verify the accuracy of the DVRFS data base produced using the GWSI Utilities application. Because of different data-base structures, it was not possible to have a one-to-one verification using queries, so an organized visual inspection is being used. Development efforts on additional functionality for the original GWSI Utilities Verification Program also continued, with effort focused on verification of latitude/longitude to northing/easting conversions. Minor issues with GWSI Utilities discovered during verification of the application were resolved. Editing of the lithologic data base continued, and staff investigated incorporation of non-GWSI data into the DVRFS data base. Work continued on visualization of transient water levels, testing and debugging of Hydrograph Analyst was completed, and compilation of documentation for Hydrograph Analyst began.

Efforts to develop and refine the hydrogeologic framework model (HFM) included work to obtain currently existing 3-D data sets (such as the USGS Silent Canyon caldera model, the Underground Test Area [UGTA] Frenchman Flat version of the regional geologic model, and the YMP Yucca Mountain geologic framework model, GFM 3.0). Cross sections to be incorporated digitally into the transient framework model were examined. Responses to review comments on the steady-state framework model report were compiled; illustrations require a great deal of additional work. Field examinations were made of spatial relations of lithologies present in the eastern part of the DVRFS model area. Work on facies maps of specific hydrogeologic units continued; those facies maps will be submitted for technical review in the near future. The hydrostructural map received editing and approval by the USGS Central Energy Team, in preparation for publication in the USGS informal Miscellaneous Field (MF) map series. A publication plan has been drawn up by the Central Publications Group. Work continued on text and figures for facies analysis of the Tertiary undifferentiated-sediments hydrogeologic unit. Much of the month was spent editing entries in the borehole database (particularly for Amargosa Desert boreholes) and creating contour maps of facies properties. Facies analysis of the Lower Carbonate Aquifer (LCA) hydrogeologic unit also continued. Field investigations examined exposures of both the LCA unit and the undifferentiated-sediments hydrogeologic unit.

Several efforts continued in flow-model construction and calibration. Areas for improvement in the steady-state model were identified. Incorporation of the new hydrogeologic framework model into the transient model was discussed, and better ways to simulate recharge and discharge were developed. Activity continued with the water-use group in determination of well depths for TRS (township/range/section) and model-grid coordinate systems. Development of pumpage-history plots for major withdrawal areas in the DVRFS remained an on-going task. Evaluation of long-term hydrographs in major withdrawal areas also began. A progress report was submitted to the TPO and to the NTS Project Manager in completion of Level 5 **milestone SPH703M5 [Transient Target Heads Progress Report]** on May 23. Work continued on the intranet web site for flow-model visualization.

Several efforts contributed to AMR preparation. Work supporting the hydrogeologic framework AMR included compilation of preliminary hydrostratigraphic cross sections, based on lithostratigraphy of the Nye County EWDP boreholes, to be used to update the HFM. In addition to the EWDP borehole data, aeromagnetic and gravity surveys were used in construction of the cross sections. On-going revisions to the HFM AMR text also continued. The first draft of text and attachments for the revised water-level AMR was completed and submitted for informal review of QA-related items. The draft of the potentiometric-surface map received two technical reviews. Responses to the review comments were compiled and sent back to reviewers for concurrence.

## CLIMATE and PALEOHYDROLOGY

Isotopic and geochemical investigations again continued. On-going work, related to validation of sources of surficial carbonate, consisted of completion of some 15 strontium isotope analyses of whole-rock samples of surface carbonate deposits.

Work to evaluate ages of calcite and opal fracture coatings and fracture fillings also continued. Opal subsamples were selected from the same sample locations previously used for ion-microprobe analyses. The new subsamples will be prepared for U-series dating by *in situ* microdigestion with hydrofluoric acid. Solutions (samples) produced in that microdigestion will be analyzed directly in the thermal-ionization mass spectrometer, with that analysis expected to be performed in June. The microdigestion method will be used to evaluate and verify the 30- to greater than 500-ka U-series ages previously determined for successively deeper opaline microlayers by ion-probe analyses. If age determinations are similar, the new method thereby would verify previous determinations of slow opal growth rates in fracture minerals from the Topopah Spring welded hydrogeologic unit (TSw).

X-ray fluorescence data from samples from borehole USW SD-6 were compiled into a single spreadsheet along with corresponding determinations of calcite by CO<sub>2</sub> evolution. Preparation of the associated data package was initiated.

Work on evaluation of the effects of water-rock interaction on engineered barrier (EBS) materials proceeded with petrographic examination for evidence of hydrothermal alteration of 12 samples of the crushed tuff material used in the EBS column experiments. The crushed rock used in the column experiment was composed of angular fragments (approximately ¼-inch size) of crystal-poor Topopah Spring Tuff. The original glass of the shards was converted to fine-grained quartz and alkali feldspar during welding and devitrification. As is typical of the crystal-poor member, only sparse phenocrysts [consisting of feldspar, quartz, biotite, and opaque minerals including pyrite (?)] are present in a few of the fragments in each petrographic slide. Alteration that developed during the column test consists of reaction rims in the outermost parts of the grains and amorphous silica deposits which formed on grain surfaces. Those rims typically are about 0.2 to 0.3 mm thick and are visible in all of the thin sections. In some grains, the rims exhibit a bleached appearance, and in others they exhibit an apparent oxidation phenomenon. The lighter-colored grains display the more obvious alteration rims. Internally, fragments appear to be unaltered. The amorphous silica that formed is colorless, shows moderate negative relief (index of refraction less than that of the mounting media, which is 1.52 to 1.54), and is isotropic (showing no interference colors in cross-polarized light). That silica occurs as thin coatings on many grains and as fibrous outgrowths up to 0.3 mm long and 0.03 mm wide commonly oriented orthogonally to surfaces of the grains. Those delicate features are best-preserved in samples in which many grains have been cemented by the silica, a feature which probably protected the fibers during thin-section preparation. Grains in some slides show alteration rims and thin coatings of silica, but delicate filaments are not well-preserved. Several slides show little evidence of alteration. This variability is thought to represent the locations in the column from which the samples were taken. These observations were reported to the EBS team by memorandum on May 24, 2001.

In preparation for isotopic dating of ground water, a draft requisition and QC-sample plan for radiocarbon dating of the dissolved organic carbon in ground water was completed on May 18, 2001, and approved by OQA. The requisition was forwarded to the USGS Contracts group, and the award is expected to be made by July 2001.

Evaluation of pore-water geochemistry also continued. In preparation for extraction of pore water from the densely welded units composing the potential repository horizon, process blanks were analyzed on the USGS plasma mass spectrometer (ICP-MS). Several procedures were changed as a result of these blank measurements, including use of laboratory-deionized water in place of house-distilled water, use of plastic gloves for all physical manipulation of the ultracentrifuge cups and core samples, and confining manipulation of samples and cups under the laminar-flow hoods. Following those modifications, the results of analysis of process blanks were reduced to acceptable levels, and work commenced on extracting water from core samples taken from the ECRB. In May, five samples were successfully obtained from core, and those samples produced 2.5 to 3 ml of water per 160 grams of rock. Samples were transferred to the chemistry laboratory for analysis. Chemical analyses were conducted on the five samples of water mentioned above. Measurements of pH and conductivity were made immediately following ultracentrifugation and filtration (at 0.45 microns). Bicarbonate is determined

by microtitration. Major and trace cations, including those of specific interest to the Waste Package Department such as Pb, Hg, and As, are determined by ICP-MS. The anions chloride, fluoride, bromide, nitrate and sulfate are determined by ion chromatograph. Staff attended the pre-planning meeting on May 24 for Waste Package work, which provided an opportunity to talk with T. Summers (WP Dept. Manager), C. Palmer, and G. Gdowski, all of LLNL. Contributions from USGS investigations to that work package will provide the Waste Package team with exactly the analytical information that they need in assessing the role of natural water on corrosion of waste canisters, and they were pleased to hear of the progress that the USGS is making.

The Sample Management Facility (SMF) has obtained the rock crusher from the Atlas Facility and is ready to start crushing intervals of the  $^{36}\text{Cl}$  validation core. It was decided on May 24 that some surplus core will be crushed to establish crusher settings to minimize production of fines (less than ¼-inch size). Once that has been done, crushing will commence on core from the Sundance Fault area, and distributions will be made to LANL and LLNL for analyses.

Revisions were made to three papers intended for publication in a special Yucca Mountain geochemistry issue of APPLIED GEOCHEMISTRY. The papers address several aspects of UZ mineral growth and hydrochemistry:

*U-Pb ages of secondary silica at Yucca Mountain, Nevada: Implications for the paleohydrology of the unsaturated zone*, by L. Neymark, Y. Amelin, J. Paces, and Z. Peterman;

*Paragenetic relations and evidence for secondary mineral formation in unsaturated-zone tuffs at Yucca Mountain, Nevada*, by J. Whelan, J. Paces, and Z. Peterman;

*$^{234}\text{U}/^{238}\text{U}$  evidence for local recharge and patterns of ground-water flow in the vicinity of Yucca Mountain, Nevada, USA*, by J. Paces, K. Ludwig, Z. Peterman, and L. Neymark.

Additional papers were presented at conferences. A paper was prepared and presented at the Eleventh Annual V.M. Goldschmidt Conference held in Hot Springs, Virginia, on May 23, 2001. The title of the presentation was "U-Pb geochronology of opal and chalcedony," and an extended abstract was published on CD-ROM in the proceedings volume. Other staff presented a paper (describing on-going work on calcite/opal fluid inclusions) at the High-Level Radioactive Waste Management conference. That paper also was published in a CD-ROM volume. Those citations are:

Neymark, L.A., and Amelin, Y., 2001, U-Pb geochronology of opal and chalcedony, *in* V.M. Goldschmidt Conference, Eleventh Annual Conference, Hot Springs, Virginia, May 2001: Houston, Texas, Lunar and Planetary Institute, LPI Contribution No. 1088, Abstract #3056 (CD-ROM).

Whelan, J.F., Roedder, E., and Paces, J.B., 2001, Evidence for an unsaturated-zone origin of secondary minerals in Yucca Mountain, Nevada, *in* High-Level

Radioactive Waste Management, Proceedings of the Ninth International Conference, Las Vegas, Nevada, April 29—May 3, 2001: La Grange Park, Illinois, American Nuclear Society (CD-ROM).

## WATER-RESOURCES MONITORING

Ground-water levels were measured at 33 sites, and ground-water discharge was measured at five springs and at one flowing well. Ground-water data collected during April were checked and filed. Staff reviewed data on ground-water levels and discharges collected and compiled for monitoring sites from January through March 2001. In a previously unreported accomplishment, a letter report on that water-level information was prepared and delivered to DOE on April 30 in completion of Level 5 **milestone SSW702M5 [Letter Update: 2<sup>nd</sup> Quarter FY2001]**. Compilation continued of historical ground-water levels, spring-flow discharges, precipitation, and water-use data from the study area.

# USGS Milestone Report

October 1, 2000 - May 31, 2001

Sorted by Baseline Date

Level: 5

Deliverable	Due Date	Expected Date	Completed Date
<b>SPI022CM5</b> Strat Workbook: 2nd Qtr Data Submittal	3/30/01	9/28/01	
<b>SPH457CM5</b> EBS DP to TDB/RPC	3/30/01	7/31/01	
<b>SPH48CM5</b> Dissolved Ion/Iso Anlys Data Pkg to RPC/TDB	3/30/01	7/30/01	
<b>SPH715M5</b> Steady-State Model Report to Review	3/30/01	4/26/01	4/26/01
<b>SPH459CM5</b> Document Missing Closing Calibrations	3/30/01	7/31/01	
<b>SPH477CM5</b> Descript & DP: Dissolved Ion & Isotopic Anal	3/30/01	3/30/01	3/30/01
<b>SPH737CM5</b> Moisture Monitoring DP to RPC/TDB	3/30/01	7/31/01	
<b>SPH956CM5</b> Fluid Inclusion Data to RPC/TDB	3/30/01	9/14/01	
<b>SPI024CM5</b> Strat Workbook: 3rd Qtr Data Submittal	3/30/01	9/28/01	
<b>SPH856CM5</b> Document Missing Closing Calibrations	3/30/01	7/31/01	
<b>SPH398CM5</b> Report: WL Data for Calendar Year 1999	3/30/01	7/31/01	
<b>SPH396CM5</b> Water-Level Data 3rd Qtr FY00 DP to RPC/TDB	3/30/01	3/9/01	3/9/01
<b>SPH394CM5</b> Water-Level Data 2nd Qtr FY00 DP to RPC/TDB	3/30/01	3/9/01	3/9/01
<b>SPH291CM5</b> Diss Ion & Iso Anlys of Perched Wtr to RPC/TDB	3/30/01	3/30/01	3/30/01
<b>SPH876CM5</b> Document Missing Closing Calibrations	3/30/01	7/31/01	
<b>SPH872CM5</b> Alcove 1 DP to RPC/TDB	3/30/01	7/31/01	
<b>SPH747CM5</b> Document Missing Closing Calibrations	3/30/01	7/31/01	
<b>SPI026CM5</b> Strat Workbook: 4th Qtr Data Submittal	3/30/01	9/28/01	
<b>SPH854CM5</b> Cross Over Infiltration DP to RPC/TDB	3/30/01	7/31/01	

# USGS Milestone Report

October 1, 2000 - May 31, 2001

Sorted by Baseline Date

Level: 5

Deliverable	Due Date	Expected Date	Completed Date
<b>SPH689M5</b> Progress HFM Update - Litho/Struct	3/30/01	3/29/01	3/29/01
<b>SPM311M5</b> ATC Hydraulic Testing Data to TDB/RPC	3/30/01	7/31/01	
<b>SPH490CM5</b> Alluvium Tstg Complex Results DP to RPC/TDB	3/30/01	7/31/01	
<b>SPH45BCM5</b> Uranium/Strontium Anlys Data Pkg to RPC/TDB	3/30/01	7/30/01	
<b>SPH3491CM5</b> RPC/TDB: SD-6 Pumping/Monitoring Data Pkg	4/2/01	3/21/01	3/21/01
<b>SPM403M5</b> Status of Water-Level AMR, Rev 1	4/11/01	4/2/01	4/2/01
<b>SPM341M5</b> Phase 2 Borehole Lithologies to TDB/RPC	4/16/01	6/29/01	
<b>SSH617CM5</b> Document Missing Closing Calibrations	4/26/01	7/31/01	
<b>SSH615CM5</b> Tipping Bucket Monitoring Data to RPC/TDB	4/26/01	7/31/01	
<b>SPM509M5</b> Status of HFM Update	4/27/01	4/19/01	4/19/01
<b>SSW702M5</b> Letter Update: 2nd Qtr FY01	4/30/01	4/30/01	4/30/01
<b>SPH345CM5</b> Closing Calibration Data to TDB/RPC	4/30/01	6/29/01	
<b>SPH965CM5</b> Submit Borehole Logs	4/30/01	9/28/01	
<b>SPH970CM5</b> Submit Ring Density TDIF	5/30/01	8/27/01	
<b>SPW393AM5</b> Manual WL Data Jul-Dec 00 to TDB/RPC	5/31/01	7/31/01	
<b>SPH703M5</b> Transient Target Heads Progress Report	5/31/01	5/23/01	5/23/01
<b>SPW393BM5</b> Continuous WL Data Aug 00-Mar 01 to TDB/RPC	5/31/01	8/31/01	

YMP PLANNING AND CONTROL SYSTEM (PACS)

MONTHLY COST/FTE REPORT

Participant U.S. Geological Survey  
Date Prepared: 6/12/01 07:55 AM

Fiscal Month/Year May 31, 2001  
Page 1 of 1

CURRENT MONTH END

FISCAL YEAR

WBS ELEMENT	ACTUAL COSTS	PARTICIPANT HOURS	SUBCONTRACT HOURS	PURCHASE COMMITMENTS	SUBCONTRACT COMMITMENTS	ACCRUED COSTS	APPROVED BUDGET	APPROVED FUNDS	CUMMULATIVE COSTS
1.2.21.2.1	11	0	0	0	0	0	25	0	11
1.2.21.3.2	0	0	0	0	0	0	110	0	0
1.2.21.3.S	0	0	0	0	0	0	75	0	0
1.2.21.3.U	0	0	0	0	157	0	363	0	3
1.2.21.5.2	57	241	10	0	0	0	598	0	376
1.2.21.5.3	189	749	1147	0	351	0	1000	0	1547
1.2.21.5.4	223	3079	378	0	63	0	1600	0	1391
1.2.21.5.T	73	408	419	0	98	0	432	0	357
1.2.21.6.1	207	1531	770	0	168	0	1982	0	1108
1.2.22.4.6	54	795	176	0	85	0	335	0	382
1.2.22.4.E	0	-37	0	0	35	0	100	0	45
1.2.22.4.S	146	2418	28	0	142	0	1744	0	928
1.2.22.4.U	273	2354	2477	0	107	0	1969	0	1228
1.2.22.5.2	0	0	0	0	0	0	25	0	0
1.2.22.6.T	26	-787	0	0	0	0	350	0	335
1.2.22.8.0	0	0	0	0	0	0	50	0	27
	1259	10751	5405	0	1206	0	10758	0	7738

U.S. GEOLOGICAL SURVEY

ESTIMATED COSTS FOR October 1, 1999 - May 31, 2001

6/7/01 10:29:00 AM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	EST	
4889-21211 Science Support to Vol. 1 SR (LOE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	11.17
<b>81912121U1</b> Science Support to Volume 1 - SR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	11.17
<b>2016</b> Site Recommendation Rprt Vol. 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	11.17
1.2.21.2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	11.17
4889-21225 Qualitative Natural Analog Study UZ Move	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>81912122U1</b> Geology and Natural Analogs Liaison	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>GS6105</b> USGS YMSD-Science Support to SR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.21.2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.21.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	11.17
4889-21318 International TSPA-SR Peer Review	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21319 Science Support to TSPA-SR (LOE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21320 TSPA Checker Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>81912132U2</b> Science Support to TSPA - SR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>GS2397</b> USGS TSPA for SR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.21.3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-22209 Support to Disruptive Events	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>8191213DU1</b> Disruptive Events Process Model Rep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>GS9093</b> USGS - Tectonic Hazards PMR - SR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.21.3.D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21350 Saturated Zone PMR Finalize Field Data	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21351 Saturated Zone PMR Comment Resolutio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21355 Saturated Zone PMR rev. 1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17
<b>8191213SU7</b> Science Support to SZ PMR for SR	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17
<b>2031</b> SZ Flow and Transport PMR-SR	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17
1.2.21.3.S	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17
4889-21360 Unsaturated Zone PMR Finalize Field Dat	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.08
4889-21361 Unsaturated Zone PMR Comment Resolut	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21365 Unsaturated Zone PMR rev. 1	0.0	2.1	1.0	0.8	-3.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.31

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<b>8191213UU7</b> Science Support to UZ PMR for SR	0.0	2.1	1.0	0.8	-3.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.39
4889-21372 Infiltration Footprint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>8191213UU8</b> UZ F&T Analysis and Documentation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-21399 DEFERRED - Alcove Moisture Monitoring	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>8191213UUM</b> DEFERRED - Alcove Moisture Monito	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>2027</b> UZ Flow and Transport PMR-SR	0.0	2.1	1.0	0.8	-3.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.39
1.2.21.3.U	0.0	2.1	1.0	0.8	-3.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.39
1.2.21.3	0.0	2.2	1.0	0.8	-3.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	3.56
4732-16300 Water Resources	35.8	35.8	35.8	2.8	45.1	26.7	18.5	46.0	0.0	0.0	0.0	0.0	246.62
<b>81912152U5</b> Water Resources	35.8	35.8	35.8	2.8	45.1	26.7	18.5	46.0	0.0	0.0	0.0	0.0	246.62
4889-10715 Federal Occuational Safety & Health	8.4	10.8	7.6	8.5	7.8	10.6	6.9	9.7	0.0	0.0	0.0	0.0	70.29
<b>81912152U6</b> Federal Occupational Safety and Hea	8.4	10.8	7.6	8.5	7.8	10.6	6.9	9.7	0.0	0.0	0.0	0.0	70.29
4889-84099 DEFERRED - Precipitation Gage Monitori	4.3	16.3	15.1	8.3	9.8	3.0	1.3	0.8	0.0	0.0	0.0	0.0	58.87
<b>81912152UUM</b> DEFERRED - Precipitation Gage Mon	4.3	16.3	15.1	8.3	9.8	3.0	1.3	0.8	0.0	0.0	0.0	0.0	58.87
<b>GS9121</b> USGS ES & H Core Program - SR	48.5	62.9	58.5	19.7	62.7	40.3	26.7	56.5	0.0	0.0	0.0	0.0	375.78
1.2.21.5.2	48.5	62.9	58.5	19.7	62.7	40.3	26.7	56.5	0.0	0.0	0.0	0.0	375.78
4889-10535 Technical Data Management	36.3	35.5	48.3	36.6	35.7	38.3	36.0	68.1	0.0	0.0	0.0	0.0	334.81
<b>81912153U3</b> Technical Data Management	36.3	35.5	48.3	36.6	35.7	38.3	36.0	68.1	0.0	0.0	0.0	0.0	334.81
4889-21111 Data Q/V & Software V for SR Products	149.1	163.0	122.0	166.7	168.0	143.0	112.3	96.8	0.0	0.0	0.0	0.0	1,120.79
<b>81912153U5</b> Data Q/V & Software V for SR Produc	149.1	163.0	122.0	166.7	168.0	143.0	112.3	96.8	0.0	0.0	0.0	0.0	1,120.79
<b>GS2470</b> USGS Tech. Data Mngmnt - SR	185.5	198.4	170.3	203.3	203.7	181.3	148.3	164.9	0.0	0.0	0.0	0.0	1,455.60
4889-10714 Records	6.0	5.9	9.8	10.9	11.5	11.2	12.4	23.9	0.0	0.0	0.0	0.0	91.54
<b>81912153U4</b> Records	6.0	5.9	9.8	10.9	11.5	11.2	12.4	23.9	0.0	0.0	0.0	0.0	91.54
<b>GS9197</b> USGS Dcmnt Cntrl, Rcrds & Mngmnt	6.0	5.9	9.8	10.9	11.5	11.2	12.4	23.9	0.0	0.0	0.0	0.0	91.54
1.2.21.5.3	191.4	204.3	180.1	214.1	215.2	192.5	160.7	188.8	0.0	0.0	0.0	0.0	1,547.13
4889-10710 TPO	99.6	106.3	90.9	104.9	84.7	154.5	61.1	132.4	0.0	0.0	0.0	0.0	834.37

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<b>81912154U4</b> USGS TPO	99.6	106.3	90.9	104.9	84.7	154.5	61.1	132.4	0.0	0.0	0.0	0.0	834.37
4889-10713 Project Control	55.7	21.4	28.1	30.2	27.9	33.1	26.8	44.1	0.0	0.0	0.0	0.0	267.10
<b>81912154U5</b> Project Control	55.7	21.4	28.1	30.2	27.9	33.1	26.8	44.1	0.0	0.0	0.0	0.0	267.10
4889-11201 Regulatory Product Integrity	35.8	34.0	33.1	34.8	33.8	39.6	31.8	46.4	0.0	0.0	0.0	0.0	289.24
<b>81912154U6</b> Regulatory Product Integrity	35.8	34.0	33.1	34.8	33.8	39.6	31.8	46.4	0.0	0.0	0.0	0.0	289.24
<b>GS9135</b> USGS Project Planning & Control	191.0	161.7	152.0	169.9	146.4	227.2	119.7	222.8	0.0	0.0	0.0	0.0	1,390.71
1.2.21.5.4	191.0	161.7	152.0	169.9	146.4	227.2	119.7	222.8	0.0	0.0	0.0	0.0	1,390.71
4889-21599 DEFERRED - Water Level Monitoring Clo	19.3	13.9	17.2	16.5	37.0	21.2	19.9	37.6	0.0	0.0	0.0	0.0	182.59
4889-23099 DEFERRED - Surface Base Boreholes CI	18.4	17.7	21.2	21.2	23.4	25.0	12.2	35.5	0.0	0.0	0.0	0.0	174.68
<b>8191215TUM</b> DEFERRED - Testing and Analysis C	37.7	31.7	38.4	37.7	60.4	46.2	32.1	73.1	0.0	0.0	0.0	0.0	357.28
<b>8621</b> USGS Tst Coord/Sup for Site Activitie	37.7	31.7	38.4	37.7	60.4	46.2	32.1	73.1	0.0	0.0	0.0	0.0	357.28
1.2.21.5.T	37.7	31.7	38.4	37.7	60.4	46.2	32.1	73.1	0.0	0.0	0.0	0.0	357.28
1.2.21.5	468.7	460.6	429.0	441.4	484.6	506.1	339.2	541.3	0.0	0.0	0.0	0.0	3,670.90
4889-10401 Support & Personnel Services	19.3	36.3	22.0	30.3	22.6	29.2	22.4	26.3	0.0	0.0	0.0	0.0	208.40
4889-10402 Procurement & Property Mgt.	14.6	15.1	13.7	13.7	13.6	11.6	8.1	19.7	0.0	0.0	0.0	0.0	110.20
4889-10403 Facilities Management - Space	74.7	-44.7	149.7	-11.4	-40.6	26.0	126.8	0.0	0.0	0.0	0.0	0.0	280.44
4889-10404 Facilities Management - Computers/Phon	0.0	2.4	0.9	7.9	0.4	2.7	0.4	22.5	0.0	0.0	0.0	0.0	37.28
4889-10405 Facilities Management - Other	20.7	31.1	-19.1	0.0	0.8	0.7	1.5	34.6	0.0	0.0	0.0	0.0	70.34
4889-10406 Computer Support	20.7	20.2	16.7	14.2	17.2	15.6	13.6	24.0	0.0	0.0	0.0	0.0	142.20
<b>81912161U3</b> Support and Personnel Services	150.0	60.4	184.0	54.8	14.0	85.8	172.8	127.1	0.0	0.0	0.0	0.0	848.85
4889-10409 DEFERRED - Space and Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>81912161UM</b> DEFERRED - Space and Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>GS533</b> USGS Administrative Support - SR	150.0	60.4	184.0	54.8	14.0	85.8	172.8	127.1	0.0	0.0	0.0	0.0	848.85
4889-10711 Training Support	7.5	60.6	25.7	23.6	22.4	20.7	18.6	80.3	0.0	0.0	0.0	0.0	259.40
<b>81912161U4</b> Training Support	7.5	60.6	25.7	23.6	22.4	20.7	18.6	80.3	0.0	0.0	0.0	0.0	259.40
<b>GS9111</b> USGS Training Program - SR	7.5	60.6	25.7	23.6	22.4	20.7	18.6	80.3	0.0	0.0	0.0	0.0	259.40
1.2.21.6.1	157.5	121.0	209.6	78.4	36.5	106.4	191.4	207.5	0.0	0.0	0.0	0.0	1,108.25

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1.2.21.6	157.5	121.0	209.6	78.4	36.5	106.4	191.4	207.5	0.0	0.0	0.0	0.0	1,108.25
1.2.21	<b>626.2</b>	<b>583.8</b>	<b>639.6</b>	<b>520.6</b>	<b>517.3</b>	<b>615.9</b>	<b>530.5</b>	<b>759.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4,793.88</b>
4889-21501 Lithostratigraphic Support to Nye Co.	18.8	11.1	13.5	18.5	15.7	9.2	7.0	8.5	0.0	0.0	0.0	0.0	102.36
4889-21511 Hydrostratigraphic Cross-Sections of Nye	0.0	0.0	17.6	6.3	12.0	24.5	15.5	28.6	0.0	0.0	0.0	0.0	104.53
81912246U1 Lithostratigraphic Support to Nye Cou	18.8	11.1	31.1	24.8	27.7	33.7	22.5	37.1	0.0	0.0	0.0	0.0	206.89
4889-21502 Isotope/Hydrochemical Support to Nye Co	23.4	17.0	20.8	17.7	37.5	29.2	12.7	16.7	0.0	0.0	0.0	0.0	174.92
81912246U2 Isotope/Hydrochemical Support to Ny	23.4	17.0	20.8	17.7	37.5	29.2	12.7	16.7	0.0	0.0	0.0	0.0	174.92
RMX25LA Nye County Drilling	42.2	28.2	51.8	42.5	65.2	62.9	35.2	53.8	0.0	0.0	0.0	0.0	381.81
1.2.22.4.6	42.2	28.2	51.8	42.5	65.2	62.9	35.2	53.8	0.0	0.0	0.0	0.0	381.81
4889-21322 Effects of Water-Rock Interaction on EBS	0.0	3.0	5.3	0.0	17.3	0.6	19.3	-0.3	0.0	0.0	0.0	0.0	45.27
8191224EU2 Effects of Water-Rock Interaction on	0.0	3.0	5.3	0.0	17.3	0.6	19.3	-0.3	0.0	0.0	0.0	0.0	45.27
4889-21321 Laboratory Support for EBS Thermal Testi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8191224EU3 Thermal Conductivity (EBS)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
GS532 USGS-EBS Dgrdtn Flow & Trnsprt P	0.0	3.0	5.3	0.0	17.3	0.6	19.3	-0.3	0.0	0.0	0.0	0.0	45.27
1.2.22.4.E	0.0	3.0	5.3	0.0	17.3	0.6	19.3	-0.3	0.0	0.0	0.0	0.0	45.27
4889-21357 Hydrogeologic Framework AMR	0.0	0.4	0.0	0.0	11.5	12.0	18.3	-1.3	0.0	0.0	0.0	0.0	40.91
4889-21358 Water Level AMR	7.9	3.8	4.1	3.6	4.4	6.3	2.9	5.4	0.0	0.0	0.0	0.0	38.33
4889-22451 SZ AMRs/PMRs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8191224SU1 Science Support to SZ AMRs/PMR fo	7.9	4.2	4.1	3.6	15.9	18.4	21.2	4.0	0.0	0.0	0.0	0.0	79.23
4889-12013 Alluvial Testing Complex	60.9	33.1	45.5	27.1	24.5	43.6	25.7	36.7	0.0	0.0	0.0	0.0	297.04
4889-12014 Support to In-Situ AMR, Rev.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
8191224SU3 SZ Investigations	60.9	33.1	45.5	27.1	24.5	43.6	25.7	36.7	0.0	0.0	0.0	0.0	297.04
4889-12015 Monitor Isotope/Hydrochemical Conditions	1.2	5.9	2.6	6.3	5.6	1.9	4.3	5.3	0.0	0.0	0.0	0.0	33.19
4889-12017 Isotopic Dating of Groundwater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.90
8191224SU4 SZ Isotope Hydrology	1.2	5.9	2.6	6.3	5.6	1.9	4.3	6.2	0.0	0.0	0.0	0.0	34.08
4889-11012 Regional Modeling Data Base	5.5	6.4	7.3	38.8	21.6	46.2	60.7	35.7	0.0	0.0	0.0	0.0	222.24
4889-11017 Hydrogeologic Framework Model - Refine/	8.8	6.5	-2.0	51.0	13.6	18.2	-3.9	40.6	0.0	0.0	0.0	0.0	132.74
4889-11020 Groundwater Flow Modeling	13.0	27.8	12.3	47.1	13.8	7.5	2.0	21.1	0.0	0.0	0.0	0.0	144.54

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4889-11021 Technical Interactions - Regional Model	1.8	-1.8	0.0	0.0	10.6	5.7	0.1	1.4	0.0	0.0	0.0	0.0	
<b>8191224SU5</b> Regional Model	29.1	38.9	17.6	136.9	59.6	77.7	58.8	98.8	0.0	0.0	0.0	0.0	17.87
<b>GS522</b> USGS - SZ Flow & Trnsprt PMR - LA	99.2	82.1	69.7	174.0	105.6	141.5	110.1	145.6	0.0	0.0	0.0	0.0	517.40
1.2.22.4.S	99.2	82.1	69.7	174.0	105.6	141.5	110.1	145.6	0.0	0.0	0.0	0.0	927.76
4889-21345 Drift-Scale Test ESF	11.8	-2.5	7.5	4.7	-2.7	21.5	8.0	-0.9	0.0	0.0	0.0	0.0	927.76
<b>8191224UU7</b> Drift-Scale Test ESF	11.8	-2.5	7.5	4.7	-2.7	21.5	8.0	-0.9	0.0	0.0	0.0	0.0	47.39
<b>GS502</b> USGS - Near Field Envrn. PMR - LA	11.8	-2.5	7.5	4.7	-2.7	21.5	8.0	-0.9	0.0	0.0	0.0	0.0	47.39
4889-21303 Crossover Alcove (Alcove 8)	29.2	28.3	31.6	12.5	22.1	24.1	29.8	44.8	0.0	0.0	0.0	0.0	47.39
4889-21384 ESF/Cross Drift Moisture Monitoring	12.0	9.8	16.2	13.7	16.5	19.6	18.2	0.2	0.0	0.0	0.0	0.0	222.47
4889-21385 ECRB (Bulkhead) Moisture Monitoring	10.4	-3.0	3.4	15.3	6.5	8.2	8.0	31.6	0.0	0.0	0.0	0.0	106.08
4889-66666 Monitor for Liquid Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.44
<b>8191224UU3</b> UZ Moisture Studies	51.5	35.1	51.2	41.5	45.1	51.9	56.1	76.6	0.0	0.0	0.0	0.0	0.00
4889-22424 Surficial Carbonate Source Validation - Cr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	408.99
4889-22425 Pore Water Geochemistry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.00
4889-27009 CI-36 Validation in the ESF	10.7	11.9	9.3	9.6	18.7	15.2	8.7	31.8	0.0	0.0	0.0	0.0	6.29
4889-62213 Ages of Calcite/Opal Fracture/Cavity Coat	38.7	33.0	24.7	60.0	11.3	32.3	25.3	65.0	0.0	0.0	0.0	0.0	115.98
4889-62219 Fluid Inclusions in Calcite/Opal	20.8	25.9	26.6	28.7	55.8	43.7	25.3	73.1	0.0	0.0	0.0	0.0	290.31
<b>8191224UU4</b> UZ Isotope Hydrology	70.3	70.8	60.6	98.3	85.8	91.2	59.3	176.1	0.0	0.0	0.0	0.0	299.86
4889-21368 Busted Butte Mapping (Mineback)	0.0	5.9	16.5	7.3	2.8	0.4	5.0	21.3	0.0	0.0	0.0	0.0	712.44
4889-22401 Excavation-induced Fracture Study	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.09
4889-22402 Supplemental Surface Fracture Study	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-22403 Lithophysal Study in the ECRB Tptpll for E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-22404 3-D Fracture Network Depiction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>8191224UU5</b> Mapping (USBR)	0.0	5.9	16.5	7.3	2.8	0.4	5.0	21.3	0.0	0.0	0.0	0.0	0.00
<b>GS520</b> USGS - UZ Flow & Trnsprt PMR - LA	121.8	111.8	128.3	147.1	133.7	143.5	120.4	274.0	0.0	0.0	0.0	0.0	59.09
1.2.22.4.U	133.6	109.3	135.8	151.8	131.0	165.0	128.4	273.1	0.0	0.0	0.0	0.0	1,180.52
1.2.22.4	274.9	222.5	262.7	368.2	319.1	370.0	293.0	472.3	0.0	0.0	0.0	0.0	1,227.91
4889-22520 Update PC Plan Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,582.75
													0.00

U.S. GEOLOGICAL SURVEY

ESTIMATED COSTS FOR October 1, 1999 - May 31, 2001

6/7/01 10:29:01 AM

	OCT EST	NOV EST	DEC EST	JAN EST	FEB EST	MAR EST	APR EST	MAY EST	JUN EST	JUL EST	AUG EST	SEP EST	TOTAL
<b>81912252U1</b> Update PC Plan Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
<b>2004</b> Prep. LA Dcmntry Rcrd (Incl LSN Spp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.22.5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
1.2.22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
4889-22607 Interpret WHB Geotechnical Data	1.8	4.0	0.0	-4.0	39.0	2.7	58.1	26.1	0.0	0.0	0.0	0.0	127.64
<b>8191226TU4</b> Interpret WHB Geotechnical Data	1.8	4.0	0.0	-4.0	39.0	2.7	58.1	26.1	0.0	0.0	0.0	0.0	127.64
4889-22602 Deferred - Field Effort for WHB Geotechni	12.5	28.1	27.8	34.6	27.0	44.3	32.9	0.0	0.0	0.0	0.0	0.0	207.21
<b>8191226TUM</b> DEFERRED - Field Effort for WHB G	12.5	28.1	27.8	34.6	27.0	44.3	32.9	0.0	0.0	0.0	0.0	0.0	207.21
<b>GS8622</b> USGS Tst Coord/Sup for Site Activitie	14.3	32.1	27.9	30.6	66.0	46.9	91.0	26.1	0.0	0.0	0.0	0.0	334.85
1.2.22.6.T	14.3	32.1	27.9	30.6	66.0	46.9	91.0	26.1	0.0	0.0	0.0	0.0	334.85
1.2.22.6	14.3	32.1	27.9	30.6	66.0	46.9	91.0	26.1	0.0	0.0	0.0	0.0	334.85
4889-10712 KTI Meeting Support	0.0	0.4	4.4	13.2	8.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	26.77
<b>81912280U1</b> KTI Meeting Support	0.0	0.4	4.4	13.2	8.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	26.77
<b>GS503</b> Support Closure of NRC Key Technic	0.0	0.4	4.4	13.2	8.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	26.77
1.2.22.8.0	0.0	0.4	4.4	13.2	8.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	26.77
1.2.22.8	0.0	0.4	4.4	13.2	8.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	26.77
<b>1.2.22</b>	<b>289.2</b>	<b>255.1</b>	<b>295.0</b>	<b>412.0</b>	<b>393.6</b>	<b>417.0</b>	<b>384.0</b>	<b>498.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2,944.37</b>
1.2 OPERATING	915.4	838.9	934.5	932.6	911.0	1,032.9	914.6	1,258.4	0.0	0.0	0.0	0.0	7,738.25
CAPITAL EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRAND TOTAL	915.4	838.9	934.5	932.6	911.0	1,032.9	914.6	1,258.4	0.0	0.0	0.0	0.0	7,738.25
FTEs													
FEDERAL	57.8	61.5	58.2	65.4	85.9	73.9	56.8	65.8	0.0	0.0	0.0	0.0	
CONTRACT	42.0	37.3	35.1	39.7	34.3	36.8	34.5	34.6	0.0	0.0	0.0	0.0	
TOTAL	99.8	98.7	93.3	105.1	120.2	110.7	91.3	100.5	0.0	0.0	0.0	0.0	