GL03098 - 2 of 4

HEBER

Executive Summary

Introduction

This project plans production of hot water at the Heber area of the Imperial Valley for use in a binary cycle power plant. This involves down-hole pumps to carry unflashed liquid at high flow rates through heat exchanges and on to be reinjected at reservoir depths. As the Proposal is presented by San Diego Gas and Electric rather than a steam producer, the reservoir development plans (and economic implications to the steam producer) are incompletely presented. It is unclear whether sufficient reservoir data (i.e. flow test data, drilling techniques, etc.) would become available on a timely basis to stimulate the industry.

The Heber prospect is of moderate size and marginal temperature. Several aspects of the production and utilization schemes are innovative, unproven, and at the threshold of technology. This gives, in our opinion, an operation with fairly high risks of delays and unexpected costs. With enough financial support, we see no major risk that one 50 MWe plant can not be made to work. If this operation were proven to be profitable, there are as many as two dozen resources of similar temperature to which this newly developed technology might be transferable.

Conclusion

The geothermal reserves at Heber are clearly great enough to support the plant as proposed. At least several additional plants of the same type are likely from the same reservoir, although there are considerable risks that 1) the expansion possibilities are less than projected by the offeror and 2) the costs of the required new technology will not be competitive with alternate sources of power (including other geothermal fields in the Imperial Valley).

Although 300 to 360°F resources are more abundant than higher grade ones, the geologic settings are probably not adaptable to the reservoir development plans suggested for Heber. That is, the power plant technology may be more transferable than the reservoir sweeping innovations.

OFFEROR: Chevron/SDG&E

ADVISOR: U.S.G.S.

RESERVOIR
EXECUTIVE SUMMARY

INTRODUCTION: Brief description of project (reservoir) See Attachment

CONCLUSION: Overall adequacy of reservoir and site: See Attachment

- support plant requirements
- additional plants at site
- representative of other reservoirs

RESOURCE: Key resource parameters:

	Offeror	Advisor
Temperature (Av. reservoir)	360°F	330°-360°F
Flow rate	625,000 lbs/hr/well	pump dependent
Reservoir magnitude (energy&longevity)	500 MWe x 30 years	400 MWe x 30 years
Fluid chemistry (TDS & Gas)	14,000 ppm + negl.%	data poor
Number and depth of wells	20 between 2000-6000'	18 to 38
Production/injection well ratio	2/1	
Expected Well Life	30 years	
Significant differences	NONE	

RISKS: Major Resource Problems (List) 1) Marginal temperature for power production 2) Limited areal extent of commercial grade heat.

Major Resource Risks (List) 1) High flow rates have not been demonstrated.
2) Pumping technology not fully developed.
3) Reservoir heat sweep not proven.

OTHER: Significant input on other areas

- data acquisition, analysis and dissemination
- modeling and stimulation
- total system
- economic (commercial) implications
- capabilities of team

(Signature) ______________________ Advisor ____________ Date

OFFEROR: Chevron/SDG&E

ADVISOR: U.S.G.S.

RESERVOIR AND SITE

A. INITIAL UTILIZABLE ENERGY

1. Reservoir Temperature on Lease Hold

(a) Average temperature at depth in producable zone now.

Offeror 360°F Advisor 330°-360°F

(b) Average temperature at well head ______

(Pumped? Yes) 200 psia at wellhead

Offeror 360°F Advisor 330°F

Since the rate of production from each well will be so great (625,000 lbs/hr) there would be little difference between the reservoir temperature and wellhead temperature.

Evidence

Overall adequacy of evidence?

____ Excellent

x Good

____ Fair

____ Poor

Note main deficiencies...such as measurement methods, number and representativeness of test locations, etc.

ADVISOR: U.S.G.S.

Evidence

2. Initial Flow Rate (first year of operation)
Pumped (?) Yes

(a) Permeability, etc.

Average permeability:

Offeror 200 md / 300 md Advisor Agree for upper two zones

Detailed reservoir information is limited to 6000' because only 3 wells have been drilled to greater depths.

Quality of related measurements and analyses.

___ Excellent

X Good

___ Fair

___ Poor

Note: Number and representativen... of locations, instrumentation, ti... intervals...

Type of permeability: Fractures, barriers and other properties of reservoir which bear on permeability.

Intergranular although faults may play a more important role than previously considered.

Given available information, what is the most likely initial flow rate (in kg/sec)? Total for field

Offeror 947kg/sec Advisor same
(7,500,000lbs/hr) Field Total
Advisor Range: 300,000lb/hr to 1,000,000lbs/hr
P = .9 P = .1 (per well)

Quality of analysis and tests providing prediction of flow rate.

___ Excellent

___ Good

X Fair

___ Poor

Note pressure build-up and draw down tests, long-term flow tests...

Long-term pumping flow tests were conducted on two wells, Nowlin #1 and Holtz #1, which produced a total of 2.7×10^6 BBLS which would be equivalent to only 110 hrs of full pumped production for the demonstration project.
Shorter tests were conducted at J.D. Jackson #1 and C. B. Jackson #1. Productivity at Heber was originally assessed by 19 drill stem tests. Pressure buildup and drawdown tests were conducted, to arrive at productivity indices. See caution under A 2d other. Individual well flow rates (pumped) could suffer from inadequate pump-setting depth or reservoir draw-down.

OFFEROR: Chevron/SDG&E

ADVISOR: U.S.G.S.

RESERVOIR AND SITE

Evidence

(b) Completable Interval (h)
4 zones of 2000 ft. each
Offeror ______ Advisor producible interval reduced by sand/shale ratio. Producible interval for 2 zones approx. 2400' lower zones poorly known.

Quality of estimate?

Adequacy of h, given proposed flow rate.

____ Excellent

X Good — For two zones

____ Fair

X Poor — For two zones only three wells drilled deeper than 6000', and data not presented

(c) Scaling

TDS (all wells); ppm

Offeror 14000 Advisor ______

Advisor Range: 10,000 (P = .9) to 30,000 (P = .1)

Adequacy of flow tests, fluid chemistry analyses on produced fluids and surface tests as a basis for estimating scaling...

____ Excellent

____ Good

____ Fair

X Poor — gave only typical analyses

Non-condensable gases (all wells):

Offeror 48.37ppm H_2S .18ppm Advisor no independent data

Advisor Range: ______ (P = .9) to ______ (P = .1)

not important without flashing - under pressure maintenance will remain in solution.

Could precipitation of solids potentially cause significant reduction of flow in the wellbore? In surface pipelines?

Where, and how soon? Not thought to be a major problem because the brine will be maintained in the liquid phase in a closed system from the production wells through the power plant and into the injection wells ~~at~~ a minimum temperature of 150°F. Data is inadequate to fully asses the ~~possible~~ magnitude of this problem.

Pump? X Flashing? ______

Is this the correct approach based upon the fluid chemistry?

Vertical shaft driven turbine pumps are required to keep the brine at a pressure high enough (200 PSIA) to prevent vaporization. Chevron conducted corrosion, scaling, and plugging evaluations during production testing which indicated that potential problems should be minimal. Based on these tests and experience, no brine treatment is planned.

Evidence

(d) Other Initial Flow Rate Factors

Do any of the following reservoir characteristics indicate potential flow rate problem? (Explain any checked items)

Depth of well?

Lower zones untested for production.

Diameter of well?

Proper matching of casing diameter with pump size necessary.

Mechanical condition of well?

Similar bentonite drilling muds have shown to present major problems at East Mesa. Make sure drilling procedures accommodate newest information on best techniques.

Other?

The wells will be produced by pumping at a rate of 625,000 lbs/hr/well or 1411 GPM or 48,420 bbls/day.

The highest pumping rate on any test to date is 135,000 lbs/hr.

Therefore since such high pumping rates have not been tested there is a potential for problems to develop. These problems could provide the need for more wells. The following Table illustrates the minimum pump depths for various rates. These calculations are based on productivity indides which were derived from actual well test data. Pump manufacturers claim that shaft driven pumps may be set as low as 1500', however; to date maximum pump depths of only about 500' have been achieved in geothermal wells.. Actual pump depths for the Heber wells will be a minimum of 1100' in order to achieve the desired flow rates. As productivity indices decline, pump depths will need to be lowered to the threshold of current technology.

OFFEROR: Chevron/SDG&E

ADVISOR: U.S.G.S.

RESERVOIR AND SITE

Reason or Evidence

3. Total Initial Utilizable Energy

Given the temperature, flow rate and other factors, how many MW could be brought to the surface (initially) per year? ______ eventually

Offeror 500 MWe Advisor 400 MWe

Advisor Range: ______ to ______
P = .9 P = .1

How good is the analysis relating temperature, flow rate, and other factors to the total MW brought to the surface?

____ Excellent

____ Good

_XX_ Fair

____ Poor

Note key assumptions and deficiencies

PUMP DEPTH REQUIREMENTS

Well #	Producing rate BPD ÷	Productivity Index BPD/PSI =	Reservoir Drawdown PSI ×	Head Factor Ft =	Reservoir Drawdown Ft +	Min Pump Head Req Ft =	Total Pump** Depth Ft	
Holtz #1	10500	204	51.5	2.58	133	340	473	
T=346 F	20000	204	98	2.58	253	340	593	
	50000	204	245	2.58	632	340	972	--- Average rate and depth
Nowlin #1	10500	225	47	2.84	133	450	583	
T=366 F	20000	225	89	2.84	252	450	702	
	50000	225	222	2.84	631	450	108	--- Average rate and depth

**Represents initial setting;
Pump: setting depth will change with time
as a fraction of reservoir depletion

OFFEROR: SDG & E

ADVISOR: U.S.G.S.

RESERVOIR AND SITE

Evidence

B. LONGEVITY OF LEASEHOLD

1. Energy Volume

The total utilizable energy in the leasehold above 300 °F temperature is estimated to be (in MW thermal years):

Offeror 5,000 MWth 30 years

Advisor see table 3500-7500 MWth 30 years

Refer to "Method of Estimation"

Water Volume is estimated to contain MW thermal years

Quality of analysis of total energy volume:

____ Excellent

____ Good

X Fair

____ Poor

To what extent does this estimate include capture of heat from dry rock?

Approximately 75% of the heat extracted is from the reservoir rock.

Method of estimation: (next page)

Will the reinjection system adequately utilize such heat?

The reservoir is dominantly sand and shale. It can be assumed that this type of reservoir will be able to sustain an effective injection sweep efficiency, however the spatial distribution of wells is unorthodox and untested. The injected water should adequately extract heat from the rock.

METHOD OF ESTIMATION

The applicant estimates this reservoir will yield 500 MWe for 30 years, however; no clear evidence is presented in the application to determine how this figure was generated.

U.S.G.S. calculations are presented on the following table. A range of values are shown which were generated by varying the parameters. The heat in the water only, ranged from 2052 - 625 MWt for 30 years and by utilizing the heat from the reservoir rock, the values ranged from 7360 - 3658 MWt for 30 years.

The main assumptions were, (1) The final operating temperature is 300°F. A final operating temperature was not presented in the application and the 300°F is considered the lowest limit for generating electricity (U.S.G.S. circ. 726)., (2) The porosity (Ø = 25%) remains constant with depth. This may be a poor assumption with regard to the lower two zones., and (3) There are 4 - 2000' zones of equal heat content and productivity. Only two 2000' zones to date have been fully tested.

USGS CALCULATIONS

		T INITIAL °F		T FINAL °F		SURFACE AREA SQ. MI.		ENTHALPY BTU/LBm		DENSITY lbm/ft^3		WATER VOLUME ft^3 10"		WATER ENERGY (INITIAL) BTU 10^{15}		WATER ENERGY (FINAL) BTU 10^{15}		ROCK ENERGY EXTRACTED BTU 10^{15}		NET ENERGY EXTRACTED BTU 10^{15}	MWt FOR 30 YRS PER ZONE	MWt 30 YRS FOR 4 ZONES	RESERVOIR SANDSTONE RATIO
[He]at in [W]ater Only	1.	360	,	300	,	11.5	,	332.18	x	55.22	x	1.603	=	2.94	-	2.48	+	0	=	0.46	513	2052	1
	2.	330	,	300	,	11.5	,	300.68	x	56.31	x	1.603	=	2.71	-	2.48	+	0	=	0.23	256	1026	1
	3.	360	,	300	,	11.5	,	332.18	x	55.22	x	0.962	=	1.76	-	1.49	+	0	=	0.27	301	1204	0.6
	4.	330	,	300	,	11.5	,	300.68	x	56.31	x	0.962	=	1.63	-	1.49	+	0	=	0.14	156	625	0.6
[H]eat [G]enerated [D]uring [R]eservoir [L]ife	1.	360	,	300	,	11.5	,	332.18	x	55.22	x	1.603	=	2.94	-	2.48	+	1.19	=	1.65	1840	7360	1
	2.	330	,	300	,	11.5	,	300.68	x	56.31	x	1.603	=	2.71	-	2.48	+	0.6	=	0.83	926	3702	1
	3.	360	,	300	,	11.5	,	332.18	x	55.22	x	0.962	=	1.76	-	1.49	+	1.36	=	1.63	1817	7271	.6
	4.	330	,	300	,	11.5	,	300.68	x	56.31	x	0.962	=	1.63	-	1.49	+	0.68	=	0.82	914	3658	.6

RESERVOIR AND SITE

DATA BASE: Chevron/ SDG & E

ADVISOR: U.S.G.S.

Evidence

2. Reinjection and Change in Flow Rate

(a) Is the reinjection temperature consistent with reinjection scaling and plugging estimates? yes

(b) Fluid chemistry

To what extent will chemical plugging be a problem over the life of the plant for...

reinjection pipeline?

potentially moderate

wellbore?

minimal for producers potentially moderate for injectors

formation?

minimal for producers
uncertain for injectors

Quality of fluid chemistry analysis? For reinjection fluids.

____ Excellent

____ Good

____ Fair

_XX_ Poor

Explain:

Note reasonableness of assumptions regarding chemical effects of reinjection, added water, dump temperature, etc.

Significant charge balance error suggests inaccurate analyses.

Has the compatibility of reinjected fluids (including make up, process, and blowdown waters) been considered? NO

Injected in producing zone or other zone? In producing zones.

Is removal of particulates or another preventive control planned? Will this create new problems? How serious? (see Conversion System)

No- probably no problems

How has this been demonstrated? Workability of control plan?

Closed pressurized system

RESERVOIR AND SITE

Evidence

(c) Number and Spacing of Wells

What are the number of production and injection wells req
and injection wells required to
operate the plant during the first
year?

	Production	Reinjection
Offeror:	12 + spare	6 + spare
Advisor:	11 - 24	5 - 10

How many replacement and standby
wells will be required to operate
the plant for 5 years?

	Replacement	Standby	
Offeror:	0	2	
Advisor:	0-2	2	and standby pumps

What is the ratio of production to
reinjection wells?

Offeror 2/1 Advisor 2/1

Does the spacing of wells appear to
make the best tradeoff among temperature
differential, underground flow rate, and
heat recharge?

Method is unorthodox but (as proposed in paper by Tansey) may be as reasonable as any.

Evidence

(d) Total Reinjection and Flow Rate Change

Geological characteristics relevant to reinjection?

1) non-traceable units
2) unknown effects of faults

Will reinjection work in proposed wells? Why?

Adequate fluid disposal.
Uncertain heat sweep efficiency
Uncertain pressure maintenance

Quality of total analysis of reinjection?

____ Excellent

____ Good

XX Fair

____ Poor

Spatial configuration is poorly related to actual data.

Injection capacity of injector wells: 1,250,000 lbs/hr

Pressure assumptions?

Initial: Offeror ____ Advisor probably o.k. initially

After ____ years: Offeror ____ Advisor ____

At end of useful life: Offeror ____ Advisor ____

} can not be determined

At what rate will production flow rate decrease as a result of reservoir depletion exceeding effective re-injection?

Can not be determined

Quality of reinjection plans for Lease Hold:

____ Excellent

____ Good

XX Fair

____ Poor

D. Potential for expansion

How many MW years would this entire reservoir support?

Offeror: 500 MWe/30 yrs   Advisor: 360 MWe/30 yrs

Quality of analysis longevity:

___ Excellent
___ Good
_X_ Fair
___ Poor

Advisor Range: $\frac{180 \text{ MWe/30 yrs}}{P = .9}$ to $\frac{720 \text{ MWe/30 yrs}}{P = .1}$

It is reasonable to assume the reservoir capacity would encompass the 11.5 square miles proposed for the reservoir area based on the 300° isotherm.

The proposal identifies four distinct zones, each of 2,000 feet thickness for the producing layer. The shale layers do not seem to be taken into account as significant to allow for less thickness of the reservoir.

Based on the following parameters, the total energy was computed:

Area:	11.5 mi^2 ($\sim 31.7 \times 10^7$ ft^2)
Thickness:	2,000' for one interval
Average Porosity:	0.25
Temperature Range:	360° - 330°F

$$\text{Total Energy} = \frac{\text{BTU}}{\text{Ac-ft}} (\text{Rock}) + \frac{\text{BTU}}{\text{Ac-ft}} (\text{Water})$$

$$= \frac{1 \text{ BTU}}{4 \text{ lb}^{\circ}\text{F}} (330^{\circ}-300^{\circ}\text{F}) \; (2.65 \times 62.4 \; \frac{\text{lb}}{\text{ft}^3}) \times (1-.25) \; (\frac{43{,}560 \text{ ft}^2}{\text{Ac}}) \text{ ROCK}$$

$$+ \frac{1 \text{ BTU}}{16^{\circ}\text{F}} (330^{\circ}-300^{\circ}\text{F}) \; (\frac{\text{lb}}{0.01811 \text{ ft}^3}) \times (.25) \; (\frac{43{,}560 \text{ ft}^2}{\text{Ac}}) \text{ WATER}$$

$$= 40.5 \times 10^6 \text{ BTU/Ac-ft} = 18.0 \times 10^6 \text{ BTU/Ac-ft}$$

$$= 58.5 \times 10^6 \text{ BTU/Ac-ft}$$

$$58.5 \times 10^6 \frac{\text{BTU}}{\text{Ac-ft}} \; (\frac{14.55 \times 10^6 \text{ ac-ft}}{\text{Vol of Heber}})$$

$$= 8.51 \times 10^{14} \text{ BTU}$$

$$= 8.51 \times 10^{14} \text{ BTU} \; (\frac{1 \text{ Kw}}{3412 \text{ BTU}})$$

$$= 2.49 \times 10^{11} \text{ Kw}$$

= 949MW thermal/30 yrs

= 94.9 MWe for one zone

= 379 MWe for four zones

D. OTHER RESERVOIR & SITE FACTORS

1. Risks

Offeror: None indicated

Advisor:

(1) Ability of injection wells with respect to disposition to provide adequate sweep of heat in fluid re-cycling.

(2) Incompatability between produced fluid and fluid in injection wells. Analyses of fluid chemistry may not be representative.

(3) Pumping capability has not been demonstrated.

3. Location of Leasehold - If utilized, as the proposal indicates will be the case, leaseholds encompasse essentially the entire reservoir.

4. Space for Power Plant - Adequate

Advisor U.S.G.S.

III. CAPABILITIES OF TEAM

Reasons for Rating

A. COMPETENCE OF TEAM

1. Competence in reservoir engineering and reservoir management

________	Excellent	Chevron's oil and gas experience will be of some benefit.
X	Good	
________	Fair	
________	Poor	

2. Competence in design and construction management

________	Excellent	
X	Good	SDG & E - see earlier page
________	Fair	
________	Poor	

3. Competence in electric power generation

X	Excellent	SDG & E
________	Good	
________	Fair	
________	Poor	

Offeror Chevron/SDG &

Advisor U.S.G.S.

Reasons for Rating

B. EXPERIENCE OF TEAM

1. Experience with geothermal reservoirs

_____ Extensive

__X__ Adequate — Chevron has moderate geothermal experience

_____ Limited

_____ None

2. Experience with pilot and commercial geothermal electric power plants

_____ Extensive

__X__ Adequate — SDG & E ran Niland test facility--there have been some negative comments on the effectiveness of management.

_____ Limited

_____ None

3. Experience with local, state, and federal government regulations including the environment and the permitting process

_____ Extensive

__X__ Adequate

_____ Limited

_____ None

Offeror Chevron/ SDG & E

Advisor U.S.G.S.

(b) Plant thermodynamic performance

______Excellent

______Good

______Fair

______Poor

(c) Reliability of components and down time of plant

______Excellent

______Good

______Fair

______Poor

3. Does the Offeror provide a plan to measure and monitor actual reservoir characteristics, and to relate these to:

Predicted production and injection well performance?

Prediced reservoir characteristics

- Initial year? Yes
- Long-term decline over time? Yes
- Plant design and operation? Yes
- Other geothermal reservoirs? No

Is the reservoir data management plan adequate and feasible?

Chevron will be the operator of production and reservoir development. Their experience in geothermal makes them likely to develop sound reservoir management practices. Their proposed reservoir data management plan is acceptable.

Offeror Chevron/ SDG & E

Advisor U.S.G.S.

4. Will the Offeror provide assistance in generalizing the reservoir monitoring plan to other areas?

Yes. Monthly reports will be given to the State of CA, Division of Oil and Gas and D.O.E. upon request and to all unit participants. Technical reports assessing the reservoir performance will be published semiannually for the first two years and annual reports thereafter. We feel that this may be satisfactory, however have some reservations regarding the isolation of the resource manager (Chevron) from the PON.

5. How adequate are the analyses proposed for relating performance data to technical, commercial, and socio-economical viability of the system?

______ Excellent

__XX__ Good — Not enough detail on Chevron's participation is presented.

______ Fair

______ Poor

6. Does the offeror plan explict documentation of the permitting and regulation, process, including environmental matters?

Yes

7. Overall rating. What is the quality of the total plan for acquiring and managing data from the demonstration?

______ Excellent

__XX__ Good

______ Fair

______ Poor

Offeror Chevron/SDG & E

Advisor U.S.G.S.

VI. MODELING AND STIMULUS

A. Reservoir Characteristics

1. Is the reservoir large enough for success of the demonstration plant?
   Yes

2. How many similar reservoirs of this type exist in the U.S.? What segment of the U.S. liquid-dominated, low-and-medium salinity geothermal resource does this reservoir represent?

Two dozen similar temperature but maybe only a few with a geologically simila reservoir.

For other resources of similar temperature we would include the following, which are within $\pm$ 20°C of the subsurface temperature at Heber: Hot Springs Bay, Alaska (180°C), Power Ranch Wells, AZ (180°C), Surprise Valley, CA. (175°C Sulphur Bank Mine, CA (185°C), Brawley, CA (200°C), East Mesa, CA (180°C), Big Creek Hot Springs, ID (175°C), Sharkey Hot Springs, ID (175°C), Crane Creek, ID (180°C), Near Cambridge, ID (180°C), Baltazor Hot Springs, NV (170°C), Gerlach Hot Springs, NV (170°C), Hot Sulphur Springs, NV (185°C), Near Wells, NV (180°C), Sulphur Hot Springs, NV (190°C), Kyle Hot Spring, NV (180°C), Leach Hot Spring, NV (170°C), Hot Springs Ranch, NV (180°C), Jersey Valley Hot Springs, NV (185°C), Lee Hot Spring, NV (175°C), Lightning Dock, N.M. (170°C), Hot Lake, OR (180°C), Neal Hot Spring , OR (180°C), Crump Springs, OR (180°C), Weberg Hot Spring, OR (170°C), Thermo Hot Spring, NV (200°C), Longmire Hot Spting, WA (170°C), and Summit Creek, WA (170°C).

Resources of geologic similarity and of similar salinity are much more limited, and in fact are restricted to the Imperial Valley.

For salinity of the resources cited, the similarity applies more to the lone end of the range of salinity for similar brines. For these resources we have included, Westmorland, East Mesa, North Brawley and South Brawley.

3. Is the reservoir temperature representative of other sites likely to be commercially developed?
   Yes
4. Is brine content of this reservoir representataive of many other fields?
   Yes
5. To what extent will the reservoir and site serve as a stimulus for commercial development of other plants by:

	Representative (Excellent, Good, Fair, Poor)	Predictability
- Demonstrating broad applicability of the reservoir technology	Good	Fair
- Initiating development at a resource of large potential?	Good	Good

Why?

The many engineering problem areas if overcome, should provide a great stimulus to the industry. Conversely a failure here could hinder future development of of like reservoirs.

Offeror Chevron/ SDG & E

Advisor U.S.G.S.

MODELING AND STIMULUS

D. Overall Modeling Criteria

1. Predictability

To what extent will the demonstration provide information needed to predict reservoir and plant performance on this site, or similar sites, for follow-on plant development? (Review DATA MANAGEMENT) evaluation)

________ Excellent

XX Good (Advisor opinion).

________ Fair

________ Poor

2. Prospective Economic Success

How successful is a follow-on commercial enterprise likely to be, under conditions similar to those of the demonstration?

________ Excellent

________ Good

XX Fair (Advisor Opinion)

________ Poor